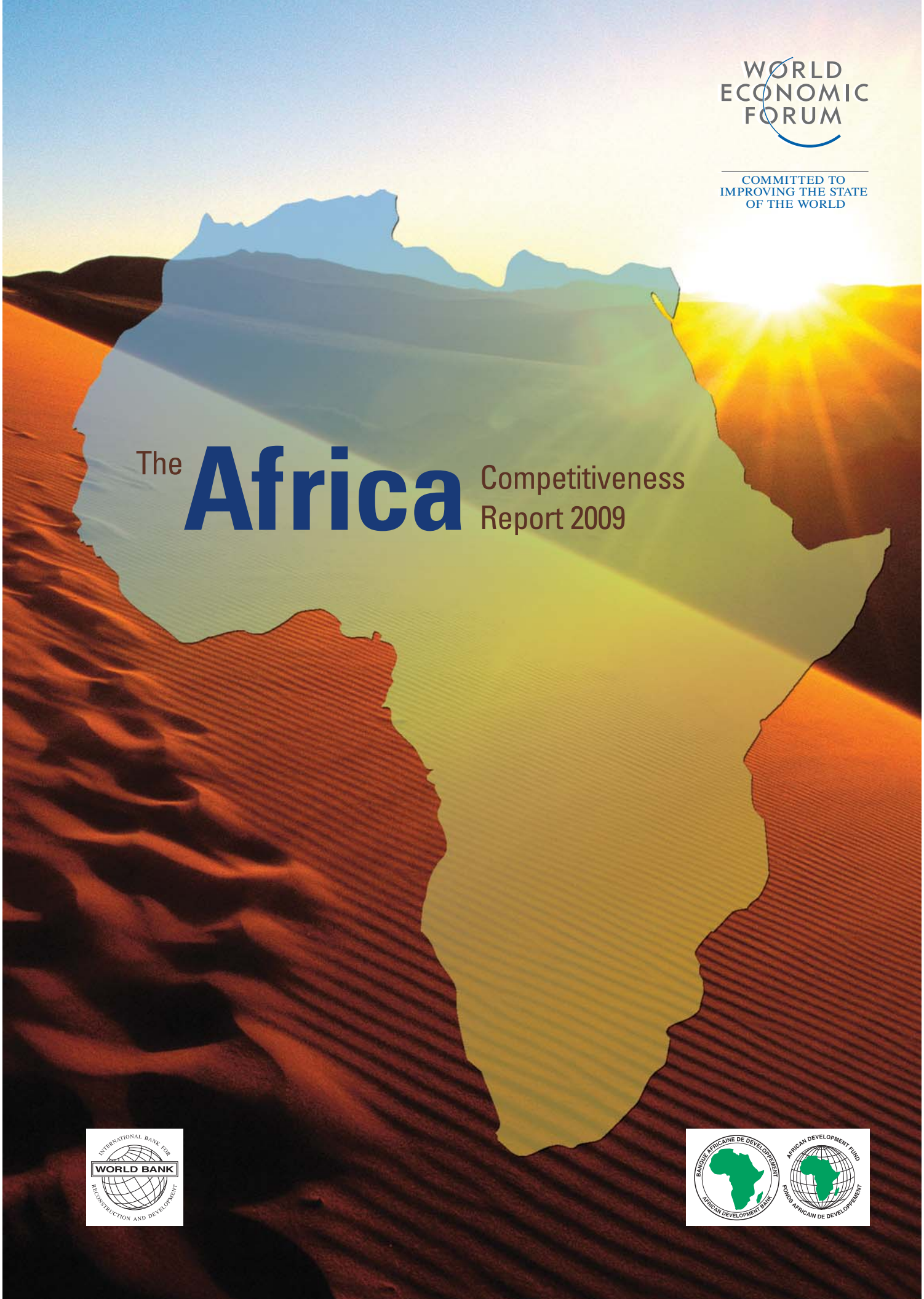
WORLD ECONOMIC FORUM
COMMITTED TO IMPROVING THE STATE OF THE WORLD
The Africa Competitiveness Report 2009
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
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BANQUE AFRICAINE DE DEVELOPPEMENT
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The Africa Competitiveness Report 2009 is the result of a collaboration between the World Economic Forum, the World Bank, and the African Development Bank.

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The terms *country* and *nation* as used in this report do not in all cases refer to a territorial entity that is a state as understood by international law and practice. The terms cover well-defined, geographically self-contained economic areas that may not be states but for which statistical data are maintained on a separate and independent basis.

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Preface

DONALD KABERUKA, President, African Development Bank Group
KLAUS SCHWAB, Executive Chairman, World Economic Forum
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[illegible] (ACR) is the second joint report of our three organizations. It arrives against the backdrop of the deepest global economic slowdown in generations.

In Africa, impressive growth rates and increasing levels of FDI supported an economic resurgence over the past decade: between 2001 and 2008, Africa experienced an average annual growth rate of 5.9 percent in gross domestic product (GDP). But the global crisis has raised questions about whether this growth performance can be sustained. African economies are less linked to global financial markets than other parts of the world, but the region has not been spared from the fall-out of the global crisis. For 2009, GDP growth for the region is expected to be below 3 percent. This growth deceleration jeopardizes the progress Africans have made in recent years in economic development, in policy and institutional reform, and, in particular, in overcoming poverty.

The ACR highlights the areas where urgent policy action and investment are needed to ensure that Africa can best ride out this crisis and continue to grow for the future. The *Report* leverages the knowledge and expertise within the African Development Bank, the World Bank Group, and the World Economic Forum to present a unified vision and a mapping of the policy challenges that countries on the continent may address. It is intended as a tool for African decision makers from private, public, and political circles to measure the business climate potential for sustainable growth and prosperity.

As such, the ACR should stimulate private-public dialogue on the issues at stake. The private sector can play a vital role in the process of reform. As essential stakeholders, businesses can support and advocate for reforms that enhance competitiveness and initiatives that create jobs. For their part, governments will want to emphasize a sound business climate as a catalyst for long-term growth and prosperity.

This year's ACR examines many aspects of Africa's business environment, with a focus on boosting prosperity across the region. The report includes assessments of the competitiveness and costs of doing business on the continent; timely analyses of the depth and sophistication of the region's financial markets; effective measures taken by the relatively smaller economies on the continent to promote their competitiveness; and the extent to which African countries have put in place measures that facilitate the free flow of trade over their borders. In its final sections, the ACR includes detailed competitiveness and investment climate profiles for each of the countries included in the *Report*.

We cannot allow today's crisis to reverse the progress that Africans have already made. Instead, we must seize this opportunity to support reform and to help Africa improve its competitiveness and growth prospects. In today's interconnected world, Africa's prosperity is important to all of us, both as a source of global growth and to promote the sustainability of globalization.

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Overview

This year's *Africa Competitiveness Report* comes out amid the most significant financial crisis in generations. In this context, the state of Africa's financial markets figures among the main topics analyzed in the *Report*. The analysis finds that some African countries—namely South Africa, Algeria, Nigeria, and Egypt—are well poised to bounce back from the crisis. This is because these large economies enjoy competitive banking systems and have functional regulatory systems, the consequence of financial-sector reforms adopted since the early 1990s. However, as the *Report* points out, not all the reforms were the same; major differences exist in the pace and approach followed by these economies. South Africa represents a case of gradual restructuring, during which its banks have spread out throughout the rest of Africa. Nigeria, on the other hand, adopted a shock-treatment type of banking-sector reform. Egypt presents mixed signals in terms of effort and success, and perhaps needs to go one extra mile now; while Algeria, which has been a slow reformer, still demonstrates remarkable financial intermediation. Hence, in drawing lessons from these experiences, all African countries should be wary that, although financial-sector reforms are needed, they are not necessarily the same for all countries. Each country must determine the approach that is most appropriate given its particular circumstances.

Before the crisis, Africa had been experiencing a strong economic expansion in recent years. Between 2001 and 2008, growth in gross domestic product (GDP) on the continent averaged 5.9 percent annually. This growth was accompanied by significant flows of FDI into the region, leading to a near doubling of FDI stocks between 2003 and 2007 according to UNCTAD.[1] However, the recent global economic turmoil has raised questions as to how sustainable this growth will be over the medium to longer run. It is true that Africa's economies are less linked than many other parts of the world to global financial markets. Yet initial discussions of economic decoupling have not been borne out, and the region has not been spared the fallout of a crisis that originated in the sophisticated financial markets of the industrialized world: the International Monetary Fund (IMF) is projecting a decline in GDP growth for the region to 2.0 percent in 2009 and 3.9 percent in 2010.[2]

The projected slowdown in GDP growth is linked to a number of external forces that relate to the global downturn and that are out of the direct control of Africans. The region is facing falling global commodity prices (and deteriorating terms of trade for a number of countries) and a potentially significant reduction in aid and remittances, as well as the threat of rising protectionism in the rich world. Coupled with these external forces are potential internal dangers that are within the control of national policymakers. African governments must avoid drawing the wrong lessons from the present financial crisis; it would be incorrect to conclude that free and open markets caused the crisis and are therefore to be avoided. It would be catastrophic for them to back-peddle on policies that facilitated improved economic performance over the past decade.

More generally, the present economic downturn underscores the importance of developing an economic environment that is based on productivity enhancements to better enable national economies to weather shocks and to ensure solid future economic performance. This means keeping a clear focus on strengthening the institutional and physical prerequisites for strong and competitive private sector–led development. And it means focusing in particular on policies and interventions that open up opportunities for entrepreneurship and employment for all members of society. This will be critical to ensure that Africa continues to move in the positive direction that it has taken over the past decade. Moreover, high rates of growth over several decades, such as those observed in developing Asian countries, are desperately needed in Africa in order to significantly raise the living standards of its people. The present crisis should be seen as an opportunity to make many of the structural changes that will place Africa on a much stronger economic footing.

This year's *African Competitiveness Report* is the second in a series within a partnership between three institutions deeply committed to Africa's development. Following on our first joint report in 2007, the African Development Bank, the World Bank, and the World Economic Forum have come together once again to underscore the importance of discussing the challenges of competitiveness in Africa. Each institution approaches the topic in its own way, which, when combined in this volume, provides the reader with a rich set of complementary views about how to expand opportunities and increase productivity and growth in Africa. (Information on the key data sources used in this *Report* can be found in Boxes 1 and 2.)

Box 1: Data used in this *Report*

The Executive Opinion Survey

The Executive Opinion Survey (Survey) conducted annually by the World Economic Forum captures the perceptions of leading business executives on numerous dimensions of the economy from a cross-section of firms representing the main sectors of the economy. The Survey compiles data points in the following areas: government and public institutions, infrastructure, innovation and technology, education and human capital, financial environment, domestic competition, company operations and strategy, environment, social responsibility, travel and tourism, and health. Most of these areas feed into the 12 pillars of the Global Competitiveness Index.

The Survey serves as a gauge of the current condition of a given economy's business climate, and the data generated from it comprise the core qualitative ingredient of the Global Competitiveness Index as well as a number of other development-related studies and indexes carried out by the Forum and other institutions. The most recent Survey data cover 134 countries, with 12,297 responses worldwide including 2,610 senior management respondents in 31 African countries.

In the Survey, business leaders are asked to assess specific aspects of the business environment in the country in which they operate. For each question, respondents are asked to give their opinion about the situation in their country of residence, compared with a global norm. To conduct the Survey in each country, the World Economic Forum relies on a network of 150 Partner Institutes. Typically, the Partner Institutes are recognized economics departments of national universities, independent research institutes, or business organizations.

More information on the Executive Opinion Survey can be found in Chapter 2.1 of *The Global Competitiveness Report 2008–2009*.

Enterprise Surveys

The World Bank's Enterprise Surveys provide another important source of data for this *Report,* collecting both perception and objective indicators of the business environment in each country. Although not carried out in every country in every year, the Enterprise Surveys are made up of larger sample sizes that allow for a nuanced analysis of the results—for example, by economic sector and gender of respondent. The data are collected through face-to-face interviews with hundreds of entrepreneurs; hence responses reflect the managers' actual experiences. The data collected span all major investment climate topics, ranging from infrastructure and access to finance to corruption and crime. Detailed productivity information includes firm finances, costs such as labor and materials, sales, and investment. The breadth and depth of data allow cross-country analysis by firm attributes (size, ownership, industry, etc.), and can probe the relationship between investment climate characteristics and firm productivity. Every year, 15–30 Enterprise Surveys are implemented, with updates planned for each country every three to five years. This reflects the intense nature of administering firm surveys and for the firms responding to the many, detailed questions. So far, over 110 countries have been surveyed, including over 20,000 entrepreneurs, senior managers, and CEOs in 38 African countries. In 10 countries in Africa, surveys have been conducted more than once; hence panel data are also available to researchers around the globe. For more information, visit http://www.enterprisesurveys.org.

Doing Business indicators

The World Bank's Doing Business indicators are carried out on an annual basis, providing a quantitative measure of a particular aspect relevant to competitiveness: business regulations relevant to the operation of domestic small- to medium-sized enterprises (SMEs) throughout their life cycle. Specifically, they cover the following topics: starting a business, dealing with construction permits, employing workers, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and closing a business. The indicators are built on the basis of standardized scenarios that permit consistency of approach and straightforward comparisons across countries. They also enable tracking of reform efforts over time. Ease of use makes this a useful tool for policy analysis. The Doing Business data are updated annually; the most recent report (published in September 2008) covers 181 economies, 50 of them in Africa. These indicators are one of the components of the Global Competitiveness Index. For more information, visit http://www.doingbusiness.org.

These three methodologies share similarities and also have differences. They are similar to the extent that they all focus on issues related to the business environment, and they are based on surveys of managers or experts. They differ in their objectives: the World Economic Forum Survey aims at capturing the differences in the business environment across countries, including the perspectives of CEOs and top managers, preferably with international experience. The World Bank Enterprise Surveys, on the other hand, aim at measuring many different aspects of the business environment and are more geared toward SMEs and domestically focused firms; the Doing Business indicators attempt to measure the regulatory environment across countries.

This joint publication looks at different factors that affect competitiveness in Africa. With *competitiveness* we mean *productivity*—in other words—the ability to create value. Hence in this *Report* we analyze both those factors related to the overall business environment (e.g., institutions, infrastructure, policies) as well as those internal to the individual firms (managerial ability, costs) that affect their level of productivity and, by extension, the productivity of the overall economy. The level of productivity of an economy, in turn, sets the sustainable level of prosperity that a country can achieve. In other words, more competitive economies tend to be able to produce higher levels of income for their citizens. The productivity level also determines the rates of return obtained by investments. Because the rates of return are the fundamental drivers of growth rates, a more competitive economy is one that is likely to grow more quickly over the medium to long term.

Accordingly, the different chapters in this *Report* highlight the large range of factors that are important for augmenting the productivity prospects of African economies. Given the present financial and economic crisis, a significant focus is placed on the state of Africa's financial infrastructure because it will be so critical not only for competitiveness but also for economic development.

Themes for sustaining development

This *Report* brings together the different approaches of each partner organization and highlights a number of common themes that emerge from the analysis of the competitiveness landscape in Africa. First, in the mist of the global crisis, two significant *short-term policy options* are of crucial importance: finance and trade.

Financial markets

This *Report* demonstrates the importance of finance for competitiveness in Africa. The present global financial crisis has highlighted the critical role of financial markets clearly. For better or worse, the future of Africa's financial systems is closely linked to the development of global finance, as are its real economies. However, it is up to the continent's financial-sector stakeholders—bankers, donors, and policymakers—to guide financial-sector reforms in a way that maximizes Africa's opportunities.

Africa's financial systems have seen deepening and broadening over the past years—the result not only of improvements in the macroeconomic and institutional framework but also of the worldwide liquidity glut, which directed more capital flows into Africa. The current global crisis threatens to reverse this trend and undermine this recent progress. In these adverse circumstances, it is even more important to upgrade the necessary frameworks for sound, efficient, and inclusive financial systems. The necessary policies include areas that governments have been working on in recent years, such as further institution building—including judicial reform and the establishment and reform of collateral and credit registries. But they also include cautious and context-specific government intervention to help financial market participants expand financial services to the frontier of commercially sustainable possibilities. Other policy areas have become even more important in the context of the global liquidity crunch. Efforts to deepen financial sovereign and corporate bond markets, for example, need to be intensified to improve the capacity for local debt financing, to provide instruments of suitable maturity and security for longer-term saving, and to facilitate the financing of African infrastructure. Finally, the global financial crisis poses new challenges for regulatory authorities across the region, as they have to be prepared for the failure of the parent bank of one of their large foreign-owned banks. By improving their crisis-preparedness, African countries can not only improve their ability to respond to possible immediate difficulties, but also address long-standing development needs supporting the preservation of asset values in situations where financial institutions need to undergo restructuring or be resolved.

These market-enabling policies discussed above require strong authorities that take an active role in redefining regulatory frameworks to include competition, inclusion, and efficiency as goals, while crowding in private initiative. In those situations where governments are called upon to intervene in financial markets, they have the opportunity to provide market-conforming interventions, such as partially guaranteeing credit to groups of borrowers—for example, small- and medium-sized enterprises (SMEs)—that are vulnerable to crowding out, while encouraging private banks to take on retail responsibility and develop expertise in credit risk assessment. Such developments imply a new role for development finance institutions on the wholesale and coordination level rather than retail lending. These policies also call for the embracing of technology to leapfrog in the attempt to broaden the outreach of the financial system. The fall-off in remittance flows intensifies pressure on governments to facilitate a reduction in the pricing of remittance transfers by opening competition among money transfer operators, lessening the costs of the domestic leg of transfers through interoperability between payments service providers, and leveling the playing field between providers of mobile-banking services and similar services provided by banks.

The current crisis also calls for a cautious approach to opening capital accounts. A premium should be put on regional integration to reap benefits from scale economies. While the time may not be right for opening capital accounts, the current crisis should not be used as a pretext for re-imposing capital controls in light of the negative repercussions they have for macroeconomic discipline and governance. The region stands to gain a great deal from the presence of both global and regional

financial institutions in terms of efficiency, competition, stability, and outreach. Foreign bank entry, however, cannot substitute for the necessary domestic reforms.[3]

Trade and free markets

As the world weathers the most significant global economic crisis since the Great Depression, it is understandable—indeed, it is essential—that efforts to restore confidence in the market have monopolized the attention of the world's policymakers. Yet, in these trying times, it would be dangerous for Africa's leaders to lose sight of those factors beyond financial markets, such as trade, that matter greatly for a country's economic success.

Empirical evidence suggests that international trade is positively associated with high economic growth. The benefits of trade are well known: it raises income through specialization, increased competition, and the exploitation of economies of scale. It increases the variety of products and services available in the market and promotes technological innovation.

Yet protectionist forces are emerging and will get stronger as the recession deepens and global trade falls. A number of countries—including some among the G20 who signed in November 2009 a pledge to avoid protectionist measures—have implemented measures to restrict trade at the expense of other countries; some African countries are also under pressure to protect their markets. Given the presence of international supply chains, protectionist measures will even further reduce global demand and restrict growth.

Pledges to avoid protectionism are common and welcome. However, domestic political pressures can easily revert such assurances. Proposals aimed at resisting the attempts to introduce protectionist barriers include encouraging transparency. Governments should commit to clearly disclose the measures taken and their rationale. These measures, which should indicate an expected duration, will encourage similar practices and avoid retaliatory measures.

The crisis has clearly shown the value of the World Trade Organization (WTO)–based multilateral trading system, although it has also highlighted the need to bind the levels of protection under WTO agreements more firmly. Hence leaders need to put back on track the Doha negotiations, since this is the only realistic way to further open world markets and lock in the trade liberalization achieved. Furthermore, although a number of measures have been taken to facilitate trade—for example, the regional development banks have substantially increased the average capacity under the relevant programs—there is a need for better coordination and information sharing, such as circulating a list of new programs among the relevant credit agencies.[4]

Enhancing trade in Africa will help the continent weather the global slowdown. Trade flows in Africa are constrained by falling prices for commodities, declining overall trade volumes, and shortages in trade finance. These conditions will increase competition in the global markets. Within this context, improvements to the trade facilitation framework to reduce the cost of exporting become even more necessary. In order to facilitate the transport of goods over borders and strengthen revenue collection, governments should accelerate reforms aimed at cutting red tape and lowering transaction costs. Customs reform comes at a relatively low cost, quickly shows results, and is usually not subject to political-economic considerations because of its technical nature. At the same time, it accrues high benefits to the country through enhanced trade and increased security as well as providing additional fiscal revenues through reduced illicit trade. Trade facilitation measures, in addition to directly affecting trade, will also have beneficial effects in the context of the current crisis: investment in infrastructure will provide a stimulus to the country's economy, and streamlining customs will improve the efficiency of fiscal revenue collection, thereby improving the ability of the government to respond to crises.

While dealing with the current crisis, African leaders should not forget those factors and policies that will remain critical for competitiveness and development once the crisis subsides. Hence, equally important *long-term policy options* to foster competitiveness in Africa remain. These notably include infrastructure; education and health; and institutions, governance, and transparency, each of which will be discussed below.

Infrastructure

Extensive and efficient infrastructure is an essential driver of competitiveness. Well-developed infrastructure reduces the effect of distance between regions, with the result of truly integrating national markets. A well-developed and efficient transport network is a prerequisite for entrepreneurs to get their goods to market in a secure and timely manner, and to facilitate the movement of workers. Economies also depend on electricity supplies that are free of interruptions and shortages so that businesses and factories can work unimpeded. Finally, a solid and extensive telecommunications network allows for a rapid and free flow of information, which increases overall economic efficiency.

This year's *Report* confirms once more that infrastructure, and more specifically energy and transport, remains a major obstacle to competitiveness in Africa. Compared with major competitors in Asia, African entrepreneurs suffer a severe disadvantage with respect to these services.

This circumstance calls for a renewed attempt by African leaders to continue in their effort to foster investments in infrastructure, technology, and products. In the mist of the current crisis, expenditures on infrastructure would serve as a fiscal stimulus for many

Box 2: The African Development Bank: Knowledge to improve investment climate and competitiveness

The African Development Bank Private Sector Country Profiles

The African Development Bank (AfDB) prepares Private Sector Country Profiles for regional member countries as part of its efforts to support an enabling environment for private-sector development on the continent. The profiles provide an in-depth analysis of the private sector: the political, economic, and legal environments; opportunities and constraints; and a strategy for the future.

The African Development Bank Country Governance Profiles

The African Development Bank Group's governance policy and its implementation guidelines provide the basis for addressing governance issues facing Regional Member Countries. Also, good governance remains a key criterion in the performance-based allocation of African Development Fund resources, with more resources going to countries with high governance ratings. The AfDB prepares Country Governance Profiles for a number of countries annually. These profiles provide detailed assessments of major governance issues in the concerned countries. They analyze the governance situation in the political, social, economic, and corporate governance areas. They also review existing policies, institutional frameworks, and related capacity issues. Finally, the profiles highlight governance challenges and propose measures and recommendations to move the governance agenda forward. The AfDB's support for good governance and anti-corruption programs is carried out through projects in public sector management, industrial import facilitation, export promotion, and institutional support.

African Economic Outlook

African Economic Outlook (AEO) is an annual publication jointly produced by the AfDB and the OECD Development Centre since 2001–02, which were joined by the UN Economic Commission for Africa in 2007. It reviews recent economic developments in Africa by adopting a comparative approach and a common analytical framework. It provides forecasts for key macroeconomic variables. The AEO surveys and analyzes the current socioeconomic performance of African economies and provides information on a country-by-country basis on their socioeconomic progress as well as on the short- to medium-term prospects of these countries. Each year, the AEO addresses a specific theme that focuses on a critical but under-researched area of Africa's socioeconomic development. The 2009 theme is *ICT and Africa's Development*. The AEO provides an overview of specific international developments that may impact African economies, country notes on selected countries, and a statistical appendix on African countries. The current edition of the AEO is the eighth, covering 47 African countries—11 more countries than in the previous edition. The key objectives of the AEO are to broaden the knowledge base on African economies and to offer valuable support for policymaking, investment decisions, and donors' interventions. Another important objective is to assist in capacity building. Through the involvement of African experts and institutions in its preparation, the AEO increases research capacity and reinforces its ownership by African local experts.

African countries. However, this must be done not at the expense of macroeconomic stability.

With respect to energy, Africa suffers from a complex set of challenges: (1) geography—the existence of plenty of resources amid poor access (a situation called energy poverty); (2) affordability—the very limited possibility to cross-subsidize energy costs; and (3) capacity—the limited ability to bring in investments and technology. These challenges need to be addressed especially through the harmonization of donors and country interventions, and by not only bringing in investments and managerial capability but also by creating the right environment.

Although a number of countries have taken concrete steps, Africa needs to do more to improve its energy generation and distribution systems. The opening of energy generation and transmission, as well as the distribution sector, must be accompanied by proper institutional and legal frameworks. Further, governments should encourage large investors and SMEs to invest privately or through public-private partnerships (PPPs) in electrification through co-generation projects, mergers of small projects to bring economies of scale, and cooperative arrangements. Governments should be wary that the sequencing of reforms is important to ensure that energy is available to all. In particular, the establishment of structures and mechanisms for increased electrification in rural areas ought to be in place before large-scale reforms such as privatization are initiated. Finally, the enormous potential of renewable energy sources (especially hydroelectric and solar) should be exploited and has the promise of making Africa not only a major producer but a net exporter of energy.

Addressing the transport problem in Africa requires action on two fronts: infrastructure and regulations. Creating a major road network in Africa has been advocated for years, but thus far has not happened. Yet such a network would generate an estimated expansion of overland trade by about US$250 billion in 15 years, with benefits for Africa's rural poor. Furthermore, road construction is labor intensive and would also help improve road safety. On the other hand, high transport

costs in Africa are mainly due to lack of competition in the trucking industry. Consequently, without a proper deregulation of trucking services, prices will remain high and firms will not benefit from the investment in road rehabilitation. In West and Central Africa, this strategy is most warranted. There cartels should be abolished and the tax structure should reward those who operate more modern vehicles and utilize them more intensively. Deregulation should also facilitate new entrants' access to freight. In East Africa and in the South African road network, lower transport costs could be achieved through improvements in some critical road sections. Similarly, the establishment of one-stop border posts would reduce delays and would help achieve lower transport prices. Finally, in East Africa it might be appropriate to lower fuel taxes in landlocked countries so that the domestic trucking operators are not disadvantaged compared with coastal countries' operators.

Education and health

A healthy workforce is vital to a country's competitiveness and productivity. Furthermore, education is increasingly important for moving up in the value chain. Lack of basic education can therefore become a constraint on business development, with firms finding it difficult to become more productive. Today's globalizing economy requires economies to nurture pools of well-educated workers who are able to adapt rapidly to their changing environment.

Despite some progress achieved in recent years, Africa continues to lag behind other regions with regard to health and education. In order to expand and improve educational attainment, African governments should: (1) enhance public information campaigns to educate communities on the right of children to attend primary school irrespective of their economic circumstances, the benefits of schooling, and the need to start school at the appropriate age (especially in rural areas and for girls); (2) increase resources that are channeled directly to the schools to ease the burden on households, especially when it comes to purchasing pupils' school materials, and tie resources to pupil retention and overall school performance; (3) deploy teachers better to ensure that qualified ones are distributed more equitably, especially in rural areas where the supply of qualified and female teachers is limited; (4) build schools closer to communities to reduce the travel time to school, and to consolidate lower and upper primary schools into one place to increase the likelihood of continuing from one level to the next; and (5) encourage private sector participation in education at all levels. Student organizations, parents' associations, and so on should monitor the system. Information-sharing mechanisms are crucial to reduce corruption and improve the use of education funds.[5]

Information, monitoring, and enforcement are crucial elements to improve any health system, regardless of the resources available for health services. Finding a balance in the public-private mix to minimize the consequences of market and government failures in financing and providing health services is a key component of providing health care.[6] Service delivery should be improved through standardization and empowerment, and policymakers must be accountable for health outcomes through (1) investing in monitoring and evaluation and (2) empowering the voice of citizens and improving mechanisms for citizen oversight. Finally, better infrastructure (roads, water, electricity, etc.) is needed to improve working conditions of health and education workers, especially in rural areas, and to increase citizens' access.[7]

Institutions, governance, and transparency

The institutional environment forms the framework within which individuals, firms, and governments interact to generate income and wealth in the economy. The institutional framework has a strong bearing on competitiveness and growth. It plays a central role in the ways in which African societies distribute the benefits and bear the costs of development strategies and policies, and it influences investment decisions and the organization of production. Owners of land, corporate shares, and even intellectual property are unwilling to invest in the improvement and upkeep of their property if their rights as owners are insecure. Of equal importance, if property cannot be bought and sold with the confidence that the authorities will endorse the transaction, the market itself will fail to generate dynamic growth. The importance of institutions is not restricted to the legal framework. Government attitudes toward markets and freedoms and the efficiency of their operation are also very important: excessive bureaucracy and red tape, overregulation, corruption, dishonesty in dealing with public contracts, lack of transparency and trustworthiness, or the political dependence of the judicial system impose significant economic costs to businesses and slow down the process of economic development.

Good governance and strong and visionary leadership through formal institutions and informal rules have greatly contributed to the success of Botswana, Mauritius, Namibia, and Tunisia. In Botswana, institutions protected the property rights of actual and potential investors and provided political stability. Mauritius and Namibia share strong and transparent public institutions as well as an independent judiciary. And Tunisia's institutions rest on fairly transparent and trustworthy relations between the government and civil society. Public governance has also played an important role in the four countries as, compared with most other African countries, they benefited from an efficient state combining responsible governments and good governance.

Indeed, recent empirical evidence has shown that growth volatility has a substantial impact on governance and conflict indicators in Africa.[8] Consequently, the cur-

rent global crisis could have unprecedented consequences for governance on the continent and could even fuel governance reform reversals. For this reason, and because of the evidence presented in this *Report,* reforms aimed at improving governance on the continent must continue. And while there have been measurable developments in the institutional environment of many African countries, much has yet to be achieved to improve governance.

In particular, institutions in Africa need to be more business friendly to foster competitiveness. More specifically, the related existence of informal payments remains a major problem. Tackling corruption is not an easy or a short process. It requires political will, popular support, and the necessary resources. Hence governments around the continent need to clearly and unequivocally declare the political will to fight corruption from the very top. Second, they will have to allocate the necessary resources to the fight—more specifically, they need to assign at least 0.5 percent of their national budgets permanently to this battle. Third, they need to establish an independent anti-corruption agency; recruit investigators and staff; define a clear mandate; and promote further reforms in civic service, public finance, procurement, and the judiciary (e.g., implement effective conflict-of-interest laws, and extractive industries transparency initiative, e-procurement, and financial transparency). Finally, they need to develop and support an anti-corruption campaign to build popular support.

Linked to the issue of governance and corruption is the issue of transparency in the regulatory environment. Significant progress has been achieved in the last few years, as demonstrated by the improved ranking of many African countries in the *Doing Business* report, for example. This notwithstanding, Africa remains the region with the lowest comparative ranking on the quality of its regulatory environment. Hence more needs to be done. Entrepreneurs in Africa still face a burdensome regulatory environment, particularly in regard to trading across borders, starting a business, and registering property. With respect to these steps, Africa stands out as a difficult location in terms of time and/or cost of doing business.

The government plays a crucial role in fostering competitiveness within the African continent. This role is not limited to facilitating a business-friendly institutional environment and an adequate supply of human and physical infrastructure. The state should also adopt active and inclusive interventions in the factors of production. For example, in the labor market the government should not only establish unemployment benefits and reduce the regulatory burden to hiring or dismissing workers, but should also adopt programs that enhance labor market integration through demand- and supply-side measures, such as labor market training, job creation in the form of public and community work programs, and enterprise creation programs. In finance, the government should promote inclusiveness by reducing the transaction costs through the creation of credit registries with repayment records, give every individual a national identification number, reduce costs of registering collateral, and support the establishment of guarantee funds. In trade, simply lowering tariffs is not sufficient to prompt export dynamism. Rather it is important to have efficient export promotion agencies (or even economic officers in foreign embassies), investment promotion agencies, standards bodies, agencies to support innovation and clustering, and duty refund schemes.

Most importantly, African governments need to be committed to fostering their economies' competitiveness by incorporating competitiveness more broadly and effectively into their national development strategies. It is therefore important that any intervention be brought together within a comprehensive strategy on competitiveness rather than being a series of ad hoc interventions.

Analyzing African competitiveness

This joint publication is organized in six chapters, each addressing different aspects of competitiveness in Africa. The first chapter of the *Report* analyzes competitiveness across the region by looking at a wide range of factors in the business environment that have an impact on productivity, from infrastructure and institutions to technology. The subsequent two chapters focus on particular aspects of Africa's financial infrastructure. The first of these looks globally at trends in Africa's financial markets, and the next is a case study of financial market development in the continent's four biggest economies. The fourth and fifth chapters analyze production costs and trade in Africa and the final chapter presents a case study of successful African countries in order to highlight the lessons learned in some of the areas described above. A number of chapters suggest concrete policy recommendations.

In Chapter 1.1, Jennifer Blanke of the World Economic Forum and Xavier Sala-i-Martin of Columbia University analyze the results for 31 African countries compared with the performance of all 134 economies included in the Global Competitiveness Index (GCI). The GCI assesses the set of institutions, policies, and factors that drive productivity and therefore set the sustainable current and medium-term levels of economic prosperity. The GCI, with its 12 distinct pillars, captures the idea that many different elements matter for competitiveness, thus setting the stage nicely for the more in-depth analysis in the chapters that follow. These pillars are identified as institutions (public and private), infrastructure, macroeconomic stability, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market sophistication, market size, technological readi-

ness, business sophistication, and innovation. The exact methodology underlying the construction of the GCI is described in the chapter.

Specific comparisons are made with relevant developing countries and regions, including Latin America, economies of developing Asia, and the four emerging BRIC countries—Brazil, Russia, India, and China. By placing individual country performances into an international context, the authors highlight those areas requiring urgent attention within African countries to increase competitiveness and to better ensure sustained strong economic performance going into the future.

The results show that there is a significant variety of performances across the continent. Some countries have been quite successful in putting into place many of the factors for economic success, such as improved public institutions, macroeconomic stability, and well-functioning markets. Yet, as is well known, many obstacles to competitiveness remain across the majority of African countries; among such constraints are underdeveloped infrastructure, deficiencies in education and health-care provision, and market inefficiencies, including those related to finance and trade.

In Chapter 1.2, Thorsten Beck, Michael Fuchs, and Marilou Uy from the World Bank show that, in spite of shallow financial markets, sub-Saharan Africa will not escape the repercussions of the global financial crisis. To the contrary, the global turmoil threatens the progress sub-Saharan Africa has made in deepening and broadening the financial sector over recent years and underlines the importance of continuing and intensifying the necessary institutional reforms. In this context, the authors show that it is important to define the role of government in expanding financial sectors in a sustainable and market-friendly manner. Foreign banks have brought more benefits than risks for their host economies in sub-Saharan Africa, but they are certainly not a substitute for institutional and policy reform. The profile of foreign banks, however, has changed, with more and more regional banks emerging. This trend toward regional integration is promising because it might allow the small African financial system to reap benefits from scale economies, but it also requires regulatory and supervisory improvements and coordination across the region.

Chapter 1.3 by Louis Kasekende and Kupukile Mlambo from the African Development Bank, Victor Murinde from the University of Birmingham, and Tianshu Zhao from the University of Stirling analyze Africa's financial markets through case studies. The authors review the broad financial-sector reforms in each of the four largest economies in Africa—South Africa, Algeria, Nigeria, and Egypt (SANE)—in the face of globalization and internal factors that may have influenced the form and impact of the reforms. The role of competitive financial sectors in Africa is crucial for economic growth—there is a large body of evidence on the positive relationship between finance and growth. The idea is that competition stimulates productivity growth either by general technical progress or by efficiency improvements, or both. An important challenge facing policymakers in Africa, while the financial sector reforms are *in situ,* is to reliably measure and monitor the competitive conditions in the financial services sector. This is especially important at this point of financial globalization and in the context of the looming threat from the global financial crisis that started in late 2007 with the sub-prime mortgage crisis in the United States. The chapter applies some plausible empirical measures of bank competitive conditions in the SANE economies, namely the *H* measure of the environment of competitive conditions among banks and the theta measure of each bank's competitiveness relative to the industry average. These metrics are recommended for use by policymakers, such as central banks, bank shareholders, and bank managers, to monitor the evolution of bank competitive conditions over time. The chapter notes three important lessons for Africa. First, financial reforms are not one-size-fits-all: there are major differences in the pace and approach among the SANE economies. South Africa represents a case of gradual restructuring, while Nigeria adopted a shock-treatment type of banking sector reform, which amounts to a "big bang," and has emerged with stronger banks; Egypt presents mixed signals in terms of effort and success, and perhaps needs to go one extra mile now; while Algeria, which has been a slow reformer, demonstrates remarkable financial intermediation. Second, the reforms in South Africa have had positive spillover effects on Botswana, Lesotho, Namibia, and Swaziland, providing lessons for East African or West African states to share access to banking, securities, insurance services, and currencies. Third, financial reforms and competitive banks should enable banks and capital markets in Africa to recover quickly when the global financial crisis is over.

In Chapter 1.4, Giuseppe Iarossi from the World Bank looks at competitiveness from the perspective of the individual firm. The author shows that, at the micro level, one way to assess productivity is by looking at how efficiently firms are able to convert inputs, and henceforth costs, into output—that is, sales. Hence this chapter looks at how costly it is to run a business in Africa compared with other regions in the world. The analysis first considers a number of costs associated with doing business (such as labor, finance, infrastructure, and the business environment) and then estimates their impact on firm productivity. The chapter classifies costs into three broad categories—direct, indirect, and invisible—and presents evidence on all of them across selected regions. The evidence demonstrates that African firms experience the highest cost—as shares of sales—in all three categories among all developing regions considered. These results illustrate the low level of competitiveness of African firms. More specifically, the author estimates that African firms are almost 20 percent more

expensive to run than firms in East Asia. After looking at each category of cost individually, the author shows that most of the competitive disadvantage of African firms is due to invisible costs—that is, losses experienced by African firms because of the poor infrastructure, demanding credit market, and burdensome regulatory environment (including corruption and lack of security). The chapter concludes by offering ideas on policy options to address these constraints.

In Chapter 1.5, Margareta Drzeniek Hanouz of the World Economic Forum and Robert Z. Lawrence of Harvard University analyze the results of 25 African countries on the Enabling Trade Index (ETI), benchmarking them against the total sample of 118 economies. The ETI measures the *factors, policies, and services facilitating the free flow of goods over borders and to destination*. The Index captures a wide range of enablers, broken down into four overall issue areas: market access, border administration, transport and communication infrastructure, and business environment. Each of these categories is composed of pillars of enabling trade, of which there are 10 in total. These are tariff and non-tariff barriers, proclivity to trade, efficiency of customs administration, efficiency of import-export procedures, transparency of border administration, availability and quality of transport infrastructure, availability of quality of transport services, availability and use of information and communication technologies (ICTs), regulatory environment, and physical security. The exact methodology is described in the chapter.

By analyzing the performance of African countries in an international and regional context, the authors identify strengths and weaknesses of the countries covered, indicate areas for improvement, and derive a set of policy recommendations for the region. Overall, the ETI results point to a high degree of heterogeneity among African countries when it comes to enabling trade, in particular when it comes to the use of tariff and non-tariff barriers but also in the efficiency of border administration and the availability of infrastructure. The results also identify the low use of ICTs as an impediment to trade.

The authors conclude that, in the short term, keeping trade levels high will contribute to mitigating the effects of the current crisis. Therefore African leaders need to withstand the pressures to revert to protectionist policies that would severely exacerbate the crisis and instead must maintain their commitment to continuing trade-enhancing reforms. In this context, reforms of border administration that have been successfully undertaken in many African economies are particularly important, as is continued investment in infrastructure.

In Chapter 1.6, Léonce Ndikumana, Peter Ondiege, and Désiré Vencatachellum from the African Development Bank and Patrick Plane from the University of Auvergne analyze the recent competitiveness performance of Botswana, Mauritius, Namibia, and Tunisia, as well as the main factors that are affecting their competitiveness. The analysis shows that economic policy has been a key explanatory factor for their competitiveness. The use of an active exchange rate policy and sound, credible, and predictable state institutions are identified as the main pillars of those countries' competitiveness. An active exchange rate policy has helped Mauritius and Tunisia, in particular, to maintain their external competitiveness. Sound institutions have been a decisive factor for reducing transaction costs and promoting innovation in those countries. Credible and predictable state institutions have encouraged entrepreneurship and supported the development process.

An important lesson from those four countries is their long-run holistic vision of development. This orientation of economic policy was supported by strong and visionary political leaders where the state played an important role. They constitute a counter example to the commonly held view that African states are typically weak. The successes of Botswana and Namibia indicate that the Dutch disease (or "resource curse") can be avoided. Mauritius and Botswana illustrate that the state can promote manufacturing diversification and seize opportunities, as they have with their partnership with the European Union. The relative success of these four economies suggests that the functioning of the market is underpinned by sound state institutions.

Beyond a sound macroeconomic framework, institutions have been a determinant factor for social cohesion in all four countries. Sometimes, as is the case in Botswana, formal and informal rules have been combined. Governance is part of this institutional environment and has proved to be efficient. States have proved to be efficient in promoting a long-run holistic vision of development, taking into account the constraint that their size imposes on small economies and the need to maintain social cohesion. The governments of Mauritius and Tunisia were concerned about the political feasibility of reforms and chose gradualism over shock therapy. This choice was made within a framework of credible public actions and the ability of these governments to commit for the long run. As in some Asian countries, PPPs were favored over large public sectors in the management of economic affairs. Some of these positive elements will prove to be significant assets for these countries in managing the implications of the global economic crisis and in diversifying their economies to enhance their competitiveness.

These four countries now face the challenge of the current global economic crisis in the short and medium term in managing their economies and competitiveness —the crisis is now having an impact on the real sector of those economies. Their growth outlooks have deteriorated and their macroeconomic balances worsened. The crisis has underscored the relative vulnerability of these four small open economies, which are highly reliant on a few key products that either face acute

competition on world markets (e.g., textiles) or whose prices are highly correlated with the global economic situation (diamonds). There is a critical role for export diversification in reinforcing the resilience of economies to external shocks so that they can enhance their competitiveness in the long run. To achieve this goal, the stiffer international competition calls for these countries to improve their business environment and deepen policy reforms.

There is a need for these countries to increase the quality of their human resources to further their competitiveness. Given their current stage of development and the global economic environment, high-quality human capital will be a key condition for these countries to enhance firm productivity, upgrade technologies, and develop high-value-added services. For this reason, higher education and training need to address labor market needs. All four countries would gain by having greater flexibility in the labor market. However, such flexibility needs to preserve the social consensus that prevented them from experiencing violence, crime, and corruption. The economies also need to facilitate increased access to bank financing. Channeling adequate and long-term financial resources to producers, which is a driving force for diversifying the economy and for the restructuring of the manufacturing sectors, still remains a challenge for them.

The final section of the *Report* provides detailed country profiles for the African countries included in the World Economic Forum's Executive Opinion Survey and the World Bank Enterprise Surveys. The first set of profiles presents the detailed rankings that go into the broader GCI ranking. The second set provides mostly objective measures of indicators of the business climate. They are drawn from the Enterprise Surveys and—thanks to the large sample size—are also presented across size of firms, export orientation, and ownership.

Notes

1 According to UNCTAD's *FDIStat* database, between 2003 and 2007, the stock of FDI increased from US$202 billion to US$393 billion. Data are available online at http://www.unctad.org/Templates/Page.asp?intItemID=3199&lang=1.

2 IMF 2009.

3 See United Nations 2006; Stephanou and Rodriguez 2008; Beck 2008.

4 Baldwin and Evenett 2009.

5 Gottret et al. 2008.

6 Akyianu 2008.

7 Coudouel et al. 2007.

8 Arbache et al. 2007.

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Part 1

Selected Issues of African Competitiveness

CHAPTER 1.1

Examining Africa's Competitiveness

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The World Economic Forum has been studying the competitiveness of nations for three decades, and began including African countries in its analysis in the early 1990s. The Forum has produced regional reports specifically focused on the economic competitiveness of the African region since 1998, when the first *Africa Competitiveness Report* (ACR) was published. This was followed by two other Forum-published editions in 2000 and 2004. In 2007, the ACR was produced jointly with the World Bank and the African Development Bank for the first time, reflecting an effort by the three organizations to provide a united voice on the competitiveness-related challenges and opportunities facing the continent. The present *Report* is the second in this joint initiative.

The goal of the ACR series has remained the same throughout the years: to highlight the prospects for sustained growth in Africa and, more importantly, the obstacles to its competitiveness and economic development. Such an assessment of Africa's economies comes at an important time. After many years of economic stagnation, and at times even decline, Africa has experienced an economic resurgence in recent years. Between 2001 and 2008, growth in gross domestic product (GDP) on the continent averaged 5.9 percent annually, according to the International Monetary Fund (IMF). This was accompanied by significant flows of foreign direct investment (FDI) into the region, leading to a near doubling of FDI stocks between 2003 and 2007, according to UNCTAD.[1] In 2008, Africa as a whole grew by an impressive 5.2 percent; the sub-Saharan African region grew even faster, at 5.5 percent.

Yet this fifth *Report* comes against the backdrop of the most significant global economic crisis in generations. Despite the recent upward trend in African income, the current global economic turmoil has raised questions about how sustainable this growth will be over the longer term. It is true that Africa's economies are less linked than many other parts of the world to global financial markets. Yet initial discussions of economic decoupling have not been borne out, and the region has not been spared from the fallout of a crisis that originated in the sophisticated financial markets of the industrialized world: the IMF is projecting a slight decline in GDP for the region in the year ahead.[2]

The expected decline in GDP is linked to a number of external forces that relate to the global downturn and that are out of the direct control of Africans. The region is facing falling global commodity prices (which, at previously higher levels, had improved the terms of trade for a number of countries) and a potentially significant reduction in aid and remittances, as well as the threat of rising protectionism in the rich world that may reduce demand for African products. Coupled with these external forces are potential internal dangers that are within the control of national policymakers. African governments must avoid drawing the wrong lessons from the present financial crisis; it would be incorrect to

conclude that free and open markets caused the crisis and are to be avoided. It would be catastrophic for governments to back-peddle on what is, in many cases, a recent market opening that has facilitated improved economic performance over the past decade.

More generally, the present economic downturn underscores the importance of developing a competitiveness-supporting economic environment that is based on productivity enhancements to better enable national economies to weather price and other types of shocks and to ensure solid economic performance going into the future. This will be critical to ensure that Africa continues to move in the positive direction that it has taken over the past decade. Moreover, high rates of growth over several decades, such as those observed in developing Asian countries, are desperately needed in Africa in order to significantly raise the living standards of its people (see Box 1 for a discussion of this issue). The present crisis should be seen as an opportunity to make many of the structural changes that will place Africa on a much stronger economic footing.

The World Economic Forum's work on competitiveness aims to contribute to a better understanding of the key ingredients of economic growth and prosperity. These are the factors that will dictate whether African countries will be able to weather the current shocks, continue on a sustained growth path, and even accelerate that growth.[3]

This chapter assesses in detail the competitiveness landscape on the continent of Africa, and of the individual countries covered by our analysis, by international standards. By highlighting the strengths and weaknesses of the region and comparing individual African economies with others from around the world, policymakers, business leaders, and other stakeholders are offered an important tool for formulating improved economic policies, institutional reforms, and investment decisions. This approach lays the background for more specific topics analyzed more in detail in the chapters that follow.

Measuring competitiveness

Which are the areas requiring policy attention in order to ensure sustained strong economic performance for African countries going into the future? The World Economic Forum's work on competitiveness aims to provide a framework for thinking about this question. In order to find a consensus on the best way forward and prioritize those areas requiring urgent policy attention, the analysis provides a bird's eye view of the competitive landscape in Africa and an overview of where the continent stands vis-à-vis international benchmarks.

In order to assess national competitiveness, the World Economic Forum has developed the Global Competitiveness Index (GCI).[4] We define *competitiveness* as *the set of institutions, policies, and factors that determine the level of productivity of a country.* The level of productivity, in turn, sets the sustainable level of prosperity that can be earned by an economy. In other words, more competitive economies tend to be able to produce higher levels of income for their citizens. The productivity level also determines the rates of return obtained by investments. Because the rates of return are the fundamental drivers of growth rates, a more competitive economy is one that is likely to grow faster over the medium to long run.

The Forum has learned from its many years of research that the measurement of competitiveness is a complex undertaking. One cannot simply pinpoint one or two areas as being critical for growth and prosperity. In this light, the GCI, with its 12 distinct pillars, captures the idea that many different elements matter for competitiveness. These pillars are institutions (public and private), infrastructure, macroeconomic stability, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market sophistication, technological readiness, market size, business sophistication, and innovation. Each of these pillars plays a critical role in driving national competitiveness.

The 12 pillars are measured using both "hard" data from public sources (such as inflation, Internet penetration, life expectancy, and school enrollment rates) as well as data from the World Economic Forum's Executive Opinion Survey (Survey), conducted annually among top executives in all of the countries assessed. The Survey provides crucial data on a number of qualitative issues (e.g., corruption, confidence in the public sector, quality of schools) for which no hard data exist.[5]

Another important characteristic of the GCI is that it explicitly takes into account the fact that countries around the world are at different levels of economic development. What is important for improving the competitiveness of a country at a particular stage of development will not necessarily be the same for a country in another stage: what presently drives productivity improvements in Japan or France is different from what drives them in Algeria or Uganda. In other words, economic development progresses in stages.

According to the GCI, in its first stage, an economy is *factor-driven* and countries compete based on their factor endowments—primarily unskilled labor and natural resources. Companies compete on the basis of price and sell basic products or commodities, with their low productivity reflected in low wages. Maintaining competitiveness at this stage of development hinges primarily on well-functioning public and private institutions (pillar 1), well-developed infrastructure (pillar 2), a stable macroeconomic framework (pillar 3), and a healthy and literate workforce (pillar 4).

As wages rise with advancing development, countries move into the *efficiency-driven* stage of development, when they must begin to develop more efficient production processes and increase product quality. At this point, competitiveness is increasingly driven by higher

Box 1: Growth and poverty reduction in Africa over recent decades

Through our competitiveness analysis, the aim is to try to understand why some countries have managed to attain and maintain higher levels of prosperity than others. Figure 1 shows the progression of GDP per capita (in international PPP dollar terms) for three countries that started off at roughly the same prosperity level in 1980: Botswana, Kenya, and Korea. Despite their similar beginnings, over the nearly three decades that followed they experienced quite different trajectories. Kenya improved very slightly; Botswana showed a very impressive performance, increasing per capita income from 1,179 international PPP dollars in 1980 to nearly 18,000 in 2008 (having avoided the resource curse that has plagued many other resource-rich countries); while Korea did even better, experiencing an 11-fold increase in its real per capita income over the period. In 1980, Botswana had about 3 times the income per head as did Kenya; by 2008 this had increased to a 10-fold difference. Why is it that some countries have been better able to provide rising living standards to their citizens than others?

The answer lies in the extent to which they have been able to put in place the enabling factors for rising productivity and the associated economic growth and sound governance in resource-dependent countries. While some countries in Africa—such as Botswana, Mauritius, and South Africa—have been able to raise living standards over time, most other countries in the region have struggled to do so.

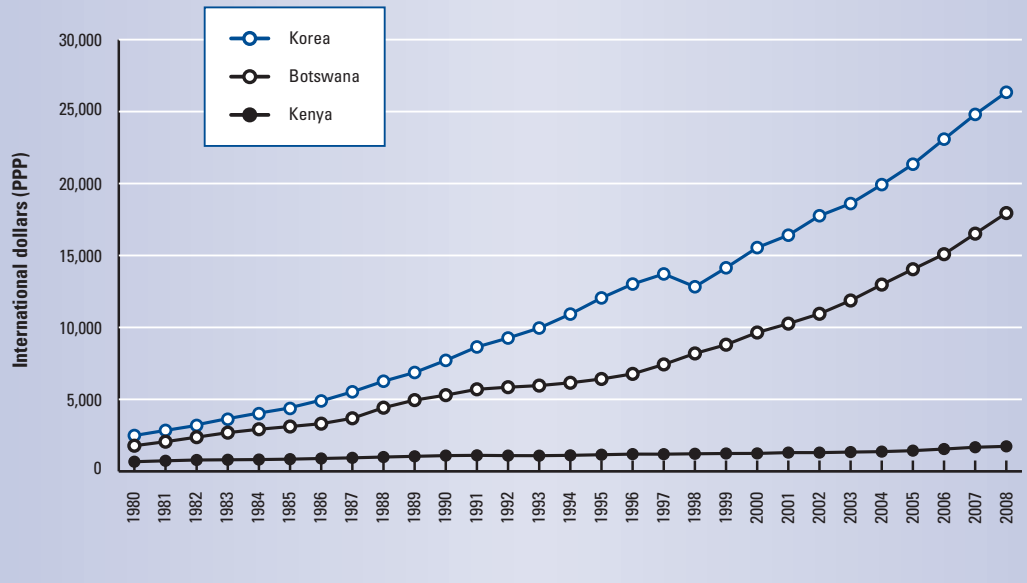
Figure 2 compares the growth rates of the African region with those of developing Asia and the world average since 1980. As the figure shows, Africa's growth rates were mostly below the world average throughout the 1980s and 1990s (even turning negative in 1992). The figure also shows that, since the beginning of this decade, African growth rates have finally exceeded those of the world in general, which is a very positive development.

This growth has allowed African countries to reduce poverty significantly in recent years, halting and reversing what had begun to look like an inexorable increase across many countries in the region. Figure 3 shows the progression in poverty rates in sub-Saharan Africa, for the percentage of the population living with less than US$1 per day and less than US$2 per day. The figure clearly shows a downward trend since the mid 1990s of both poverty measures.

Yet, despite all this positive news, Figure 2 also shows that growth rates continue to be much lower than those of the group of developing countries from Asia, a region that has raised the living standards of its citizens significantly over recent decades. Despite improvements, income levels across the continent remain low and poverty rates high. Given the positive direction of recent years, the time is propitious to tackle more of the policy- and infrastructure-related challenges in order to ensure that this growth remains sustainable and that Africa continues to see an impressive improvement in the prosperity of its citizens going into the future.

(Cont'd.)

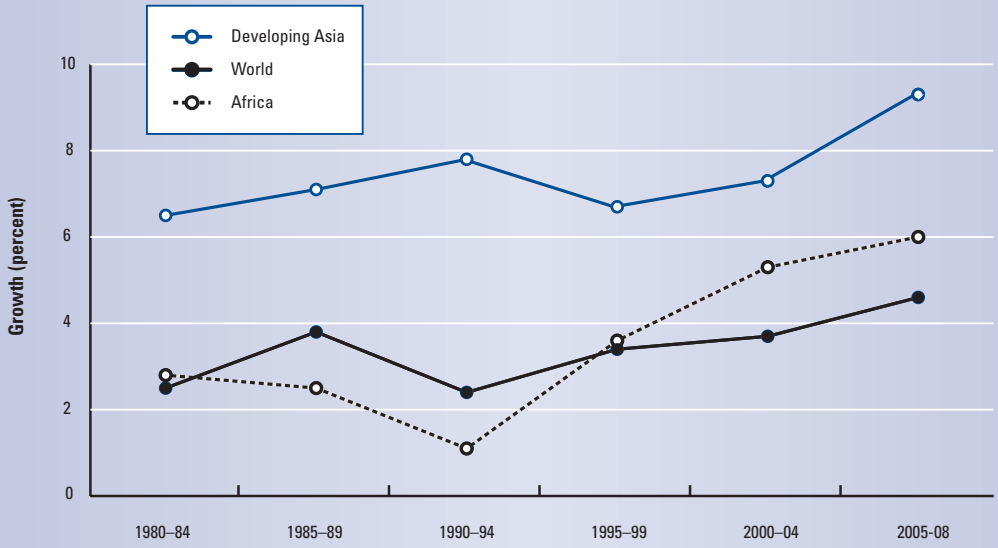
Figure 1: Gross domestic product based on purchasing power parity (PPP) per capita GDP



Source: IMF, 2008.

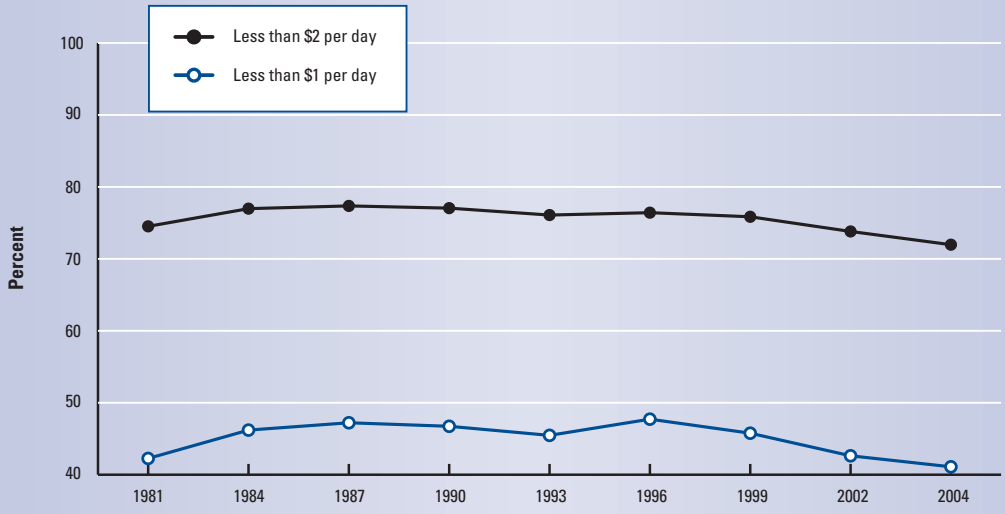
Box 1: Growth and poverty reduction in Africa over recent decades *(cont'd.)*

Figure 2: Africa's comparative growth performance, 1980–2008



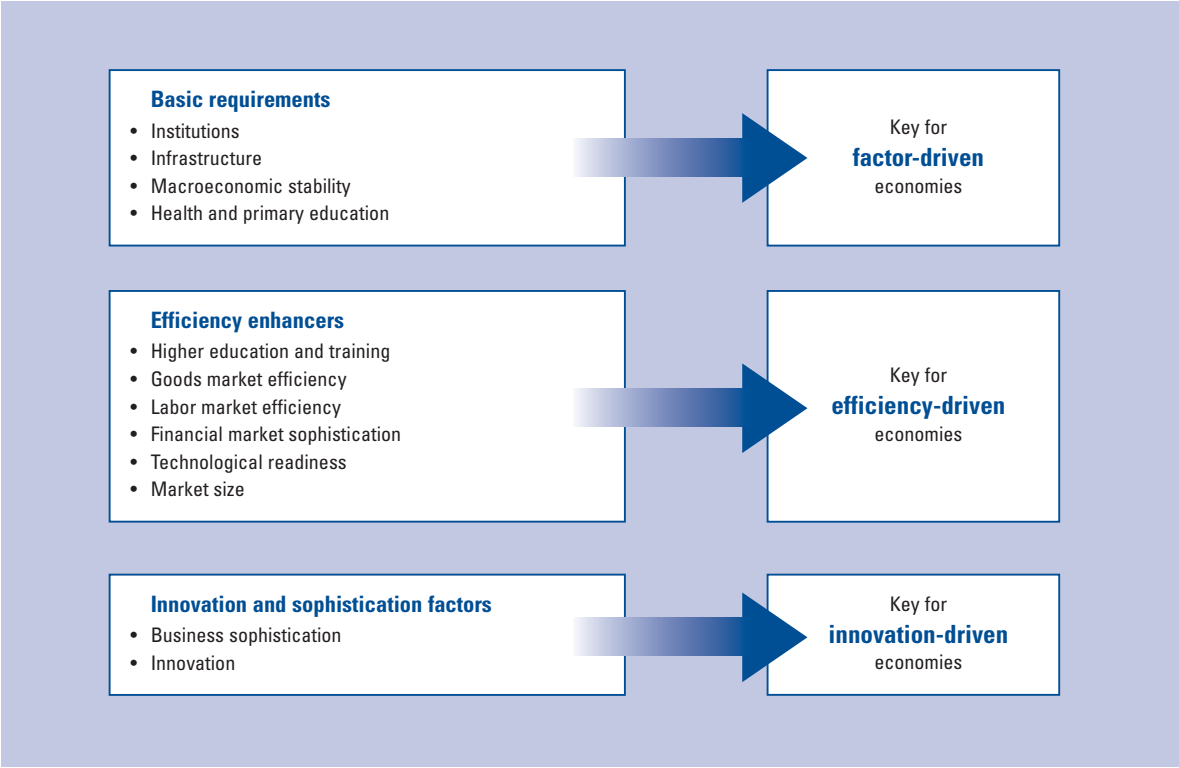
Source: IMF, 2008.

Figure 3: Percentage of the population in sub-Saharan Africa living in poverty



Source: Chen and Ravallion, 2007.

Figure 1: The 12 pillars of competitiveness



education and training (pillar 5), efficient goods markets (pillar 6), well-functioning labor markets (pillar 7), sophisticated financial markets (pillar 8), a large domestic or foreign market (pillar 10), and the ability to harness the benefits of existing technologies (pillar 9).

Finally, as countries move into the *innovation-driven* stage, they are able to sustain higher wages and the associated standard of living only if their businesses are able to compete with new and unique products. At this stage, companies must compete through innovation (pillar 12), producing new and different goods using the most sophisticated production processes (pillar 11).

The concept of stages of development is integrated into the Index by attributing higher relative weights to those pillars that are relatively more relevant for a country given its particular stage of development. That is, although all 12 pillars matter to a certain extent for all countries, the importance of each one depends on a country's particular stage of development. To take this into account, the pillars are organized into three subindexes, each critical to a particular stage of development. The *basic requirements subindex* groups those pillars most critical for countries in the factor-driven stage. The *efficiency enhancers subindex* includes those pillars critical for countries in the efficiency-driven stage. And the *innovation and sophistication factors subindex* includes all pillars critical to countries in the innovation-driven stage. Figure 1 shows how the 12 pillars relate to each stage of development.

The specific weights we attribute to each subindex in every stage of development are shown in Table 1. To obtain the precise weights, a maximum likelihood regression of GDP per capita was run against each subindex for past years, allowing for different coefficients for each stage of development.[6] The rounding of these econometric estimates led to the choice of weights displayed in Table 1.

Countries are allocated to stages of development based on two criteria. The first criterion is the level of GDP per capita at market exchange rates. This widely available measure is used as a proxy for wages, as internationally comparable data for the latter are not available for all countries covered. A second criterion measures the extent to which countries are factor driven. We proxy this by the share of exports of primary goods in total exports (goods and services) and assume that countries that export more than 70 percent of primary products are, to a large extent, factor driven.[7]

Countries falling in between two of the three stages are considered to be *in transition*. For these countries, the weights change smoothly as a country develops, reflecting the smooth transition from one stage of development to another. By introducing this type of transition between stages into the model—that is, by placing increasingly

Table 1: Weights of the three main groups of pillars at each stage of development

Pillar group	Factor-driven stage (%)	Efficiency-driven stage (%)	Innovation-driven stage (%)
Basic requirements	60	40	20
Efficiency enhancers	35	50	50
Innovation and sophistication factors	5	10	30

more weight on those areas that are becoming more important for the country's competitiveness as the country develops—the index can gradually "penalize" those countries that are not preparing for the next stage.

Table 2 illustrates the allocation of African countries into the different stages of development; it also includes a number of comparison countries. The table shows that all of the 31 countries in Africa analyzed in this *Report* are categorized in or between the first two stages—none has yet reached the innovation-driven stage. Specifically, 23 African countries are in stage 1, three are in transition between stages 1 and 2, and five countries—Algeria, Mauritius, Namibia, South Africa, and Tunisia—have reached stage 2. See Appendix A for details about the construction of the GCI.

Africa's competitiveness in an international context

This section will assess the overall competitiveness of Africa as a region, as well as the performance of individual countries compared with international standards. Table 3 shows the rankings and scores of the 31 African countries covered in the 2008–2009 GCI, compared with the rankings in 2007–2008, out of all 134 countries covered. To put the analysis into a global context, we also include a number of comparator economies. These include the averages of two relevant developing regions—Latin America and the Caribbean and Southeast Asia—as well as the ranks and scores of the four rapidly developing and large BRIC countries—Brazil, Russia, India, and China.

As the table shows, on average both North Africa and sub-Saharan Africa are outperformed by Southeast Asia. North Africa is ahead of Latin America, and also scores significantly higher than sub-Saharan Africa. Only four countries from the African continent figure in the top half of the overall ranking: Tunisia, South Africa, Botswana, and Mauritius. The most competitive country

Table 2: Selected list of countries in each stage of development

Stage 1	Transition from 1 to 2	Stage 2	Transition from 2 to 3	Stage 3
Bangladesh	Armenia	Albania	Bahrain	Australia
Benin	Azerbaijan	**Algeria**	Barbados	Austria
Bolivia	**Botswana**	Argentina	Chile	Belgium
Burkina Faso	China	Brazil	Croatia	Canada
Burundi	El Salvador	Bulgaria	Estonia	Czech Republic
Cambodia	Georgia	Colombia	Hungary	Denmark
Cameroon	Guatemala	Costa Rica	Latvia	Finland
Chad	Jordan	Dominican Republic	Lithuania	France
Côte d'Ivoire	Kazakhstan	Ecuador	Poland	Germany
Egypt	Kuwait	Jamaica	Qatar	Greece
Ethiopia	**Libya**	Macedonia, FYR	Russian Federation	Hong Kong SAR
Gambia, The	**Morocco**	Malaysia	Slovak Republic	Israel
Ghana	Oman	**Mauritius**	Taiwan, China	Italy
India	Saudi Arabia	Mexico	Trinidad and Tobago	Japan
Indonesia	Venezuela	Montenegro	Turkey	Korea, Rep.
Kenya		**Namibia**		Netherlands
Lesotho		Panama		Portugal
Madagascar		Peru		Singapore
Malawi		Romania		Spain
Mali		Serbia		Sweden
Mauritania		**South Africa**		Switzerland
Mozambique		Suriname		United Arab Emirates
Nicaragua		Thailand		United Kingdom
Nigeria		**Tunisia**		United States
Pakistan		Ukraine		
Philippines		Uruguay		
Senegal				
Tanzania				
Uganda				
Vietnam				
Zambia				
Zimbabwe				

Table 3: Global Competitiveness Index 2008 and 2007 Comparisons

	GCI 2008		GCI 2007
Country/Region	Rank*	Score	Rank**
China	30	4.7	34
Tunisia	36	4.6	32
Southeast Asia average		**4.5**	
South Africa	45	4.4	44
India	50	4.3	48
Russian Federation	51	4.3	58
Botswana	56	4.2	76
Mauritius	57	4.2	60
Brazil	64	4.1	72
Morocco	73	4.1	64
North Africa average		**4.0**	
Namibia	80	4.0	89
Egypt	81	4.0	77
Latin America & Caribbean average		**3.9**	
Gambia, The	87	3.9	102
Libya	91	3.9	88
Kenya	93	3.8	99
Nigeria	94	3.8	95
Senegal	96	3.7	100
Algeria	99	3.7	81
Ghana	102	3.6	n/a
Benin	106	3.6	108
Sub-Saharan Africa average		**3.5**	
Côte d'Ivoire	110	3.5	n/a
Zambia	112	3.5	122
Tanzania	113	3.5	104
Cameroon	114	3.5	116
Mali	117	3.4	115
Malawi	119	3.4	n/a
Ethiopia	121	3.4	123
Lesotho	123	3.4	124
Madagascar	125	3.4	118
Burkina Faso	127	3.4	112
Uganda	128	3.3	120
Mozambique	130	3.1	128
Mauritania	131	3.1	125
Burundi	132	3.0	130
Zimbabwe	133	2.9	129
Chad	134	2.8	131

*Out of 134 economies
** Out of 131 economies

from Africa is Tunisia, ranked 36th, followed next on the continent by South Africa, ranked 45th. Both countries are outperformed by China, the most competitive of the BRIC countries, but they do better than all other comparators in the table. Botswana and Mauritius are also among the top half of all countries in the larger sample, behind India, Russia, and the average of the Southeast Asian countries but ahead of Brazil and the other regional averages.

The table shows that there is a second group of countries that cluster together at approximately the same competitiveness level as the North Africa average, namely Morocco, Namibia, and Egypt, ranked 73rd, 80th, and 81st, respectively. All countries below these three perform worse than the Latin America and Caribbean average, with Libya and Algeria outperformed by a number of sub-Saharan African countries. The remaining sub-Saharan African countries that do better than the regional average are Gambia, Kenya, Nigeria, Senegal, Ghana, and Benin.

Tables 4 through 7 provide more details on what is behind the overall ranks and scores shown in Table 3. On average, the performance is very different between the countries in the North and the South of the continent. North Africa outperforms sub-Saharan Africa in 10 of the 12 pillars, namely institutions, infrastructure, macroeconomic stability, health and primary education (by a large margin), higher education and training, goods market efficiency, technological readiness, market size, business sophistication, and innovation. Sub-Saharan Africa outperforms North Africa on average in two pillars: labor market efficiency and financial market sophistication.

Comparing Africa's performance across the different pillars with the other regions and countries shown in the table, we note comparative strengths as well as weaknesses. In particular, North Africa performs very close to the Association of Southeast Asian Nations (ASEAN)[8] average in the quality of institutions, macroeconomic stability, and health and primary education pillars. Further, the region outperforms or is on a par with the Latin America and Caribbean average[9] in all pillars except four: health and primary education, labor market efficiency, financial market sophistication, and technological readiness. Sub-Saharan Africa's institutions are better assessed than those of the Latin America and Caribbean region, Russia, and Brazil. Sub-Saharan Africa's labor market efficiency is better assessed than that of the Latin America and Caribbean region, with labor markets on average on a par with those in India and Brazil.

Another notable characteristic of the African countries shown in the table is the large dispersion in scores between the best- and worst-performing countries. Tunisia and South Africa have overall scores (out of 7) of 4.6 and 4.4 respectively, compared with Chad's score of 2.8. Figure 2 provides a visual representation of the dispersion in scores of the 31 African counties, with the regional averages shown in the middle. In addition, we show the average performance of the group of Organisation for Economic Co-operation and Development (OECD) member countries, to provide a stringent international benchmark in each issue area (the OECD score is shown in the figure by a dot).

The figure demonstrates that the areas with the largest dispersions among African countries are in the quality of institutions, macroeconomic stability, health and primary education, and market size. The smallest gaps are in goods and labor market efficiency, as well as innovation. The best-performing countries from the continent actually outperform the OECD average in four areas: institutions, macroeconomic stability, labor market efficiency, and financial market sophistication.

Table 4: The Global Competitiveness Index 2008-2009: Africa and comparators

	OVERALL INDEX		SUBINDEXES					
			Basic requirements		Efficiency enhancers		Innovation factors	
Country/Region	Rank	Score	Rank	Score	Rank	Score	Rank	Score
NORTH AFRICA								
Algeria	99	3.7	61	4.5	113	3.3	126	2.8
Egypt	81	4.0	83	4.2	88	3.7	74	3.5
Libya	91	3.9	75	4.3	114	3.3	102	3.2
Morocco	73	4.1	67	4.4	85	3.7	76	3.5
Tunisia	36	4.6	35	5.2	53	4.2	30	4.2
North Africa average		**4.0**		**4.5**		**3.6**		**3.5**
SUB-SAHARAN AFRICA								
Benin	106	3.6	103	3.8	123	3.2	100	3.2
Botswana	56	4.2	53	4.6	82	3.8	98	3.2
Burkina Faso	127	3.4	126	3.4	118	3.2	95	3.3
Burundi	132	3.0	132	3.1	133	2.7	125	2.9
Cameroon	114	3.5	109	3.7	120	3.2	108	3.1
Chad	134	2.8	133	3.0	134	2.7	131	2.7
Côte d'Ivoire	110	3.5	113	3.6	109	3.3	94	3.3
Ethiopia	121	3.4	119	3.6	121	3.2	114	3.0
Gambia, The	87	3.9	81	4.2	107	3.4	78	3.5
Ghana	102	3.6	106	3.7	95	3.5	107	3.1
Kenya	93	3.8	104	3.8	76	3.9	50	3.9
Lesotho	123	3.4	118	3.6	125	3.2	110	3.1
Madagascar	125	3.4	125	3.5	119	3.2	97	3.2
Malawi	119	3.4	127	3.4	101	3.4	101	3.2
Mali	117	3.4	116	3.6	122	3.2	99	3.2
Mauritania	131	3.1	130	3.3	130	2.9	120	2.9
Mauritius	57	4.2	50	4.7	66	4.0	69	3.6
Mozambique	130	3.1	131	3.2	129	3.1	127	2.8
Namibia	80	4.0	48	4.7	93	3.6	104	3.2
Nigeria	94	3.8	105	3.7	71	4.0	64	3.7
Senegal	96	3.7	101	3.9	96	3.5	59	3.7
South Africa	45	4.4	69	4.4	35	4.5	36	4.1
Tanzania	113	3.5	114	3.6	108	3.3	106	3.1
Uganda	128	3.3	129	3.3	106	3.4	90	3.3
Zambia	112	3.5	121	3.5	100	3.4	93	3.3
Zimbabwe	133	2.9	134	2.9	131	2.9	122	2.9
Sub-Saharan Africa average		**3.5**		**3.7**		**3.4**		**3.2**
BRICs								
Brazil	64	4.1	96	4.0	51	4.3	42	4.0
China	30	4.7	42	5.0	40	4.4	32	4.2
India	50	4.3	80	4.2	33	4.5	27	4.3
Russian Federation	51	4.3	56	4.5	50	4.3	73	3.6
Latin America & Caribbean average		**3.9**		**4.2**		**3.8**		**3.4**
Southeast Asia average		**4.5**		**4.8**		**4.3**		**3.9**

Table 5: The Global Competitiveness Index 2008-2009: Basic requirements

Country/Region	BASIC REQUIREMENTS Rank	BASIC REQUIREMENTS Score	1. Institutions Rank	1. Institutions Score	2. Infrastructure Rank	2. Infrastructure Score	3. Macroeconomy Rank	3. Macroeconomy Score	4. Health and primary education Rank	4. Health and primary education Score
NORTH AFRICA										
Algeria	61	4.5	102	3.4	84	3.0	5	6.1	76	5.3
Egypt	83	4.2	52	4.2	60	3.7	125	3.6	88	5.2
Libya	75	4.3	65	3.9	112	2.5	6	6.0	103	4.6
Morocco	67	4.4	61	4.0	70	3.5	84	4.7	71	5.4
Tunisia	35	5.2	22	5.2	34	4.6	75	4.9	27	6.1
North Africa average		**4.5**		**4.2**		**3.4**		**5.1**		**5.3**
SUB-SAHARAN AFRICA										
Benin	103	3.8	85	3.7	106	2.6	95	4.6	110	4.4
Botswana	53	4.6	36	4.7	52	4.0	22	5.7	112	4.2
Burkina Faso	126	3.4	75	3.8	104	2.6	120	3.9	131	3.4
Burundi	132	3.1	124	3.0	129	2.1	124	3.8	124	3.7
Cameroon	109	3.7	116	3.2	117	2.3	34	5.5	125	3.7
Chad	133	3.0	133	2.5	134	1.7	97	4.5	134	3.1
Côte d'Ivoire	113	3.6	130	2.8	73	3.3	69	4.9	127	3.5
Ethiopia	119	3.6	77	3.8	103	2.7	119	4.0	123	3.8
Gambia, The	81	4.2	38	4.7	62	3.7	99	4.5	119	4.0
Ghana	106	3.7	63	4.0	82	3.0	121	3.9	115	4.0
Kenya	104	3.8	93	3.5	91	2.9	107	4.4	108	4.4
Lesotho	118	3.6	114	3.3	125	2.1	39	5.4	129	3.4
Madagascar	125	3.5	94	3.5	114	2.4	127	3.4	104	4.6
Malawi	127	3.4	51	4.3	119	2.3	129	3.3	120	3.9
Mali	116	3.6	79	3.7	107	2.6	94	4.6	130	3.4
Mauritania	130	3.3	107	3.4	127	2.1	126	3.5	114	4.1
Mauritius	50	4.7	39	4.7	43	4.3	117	4.0	57	5.7
Mozambique	131	3.2	112	3.3	124	2.2	112	4.2	132	3.2
Namibia	48	4.7	42	4.6	33	4.6	27	5.7	118	4.0
Nigeria	105	3.7	106	3.4	120	2.2	26	5.7	126	3.6
Senegal	101	3.9	83	3.7	83	3.0	103	4.4	109	4.4
South Africa	69	4.4	46	4.6	48	4.2	63	5.1	122	3.8
Tanzania	114	3.6	76	3.8	118	2.3	108	4.3	117	4.0
Uganda	129	3.3	113	3.3	115	2.4	92	4.6	133	3.1
Zambia	121	3.5	67	3.9	116	2.4	102	4.5	128	3.5
Zimbabwe	134	2.9	126	3.0	88	2.9	134	1.5	113	4.2
Sub-Saharan Africa average		**3.7**		**3.7**		**2.8**		**4.4**		**3.9**
BRICs										
Brazil	96	4.0	91	3.6	78	3.2	122	3.9	79	5.3
China	42	5.0	56	4.2	47	4.2	11	5.9	50	5.7
India	80	4.2	53	4.2	72	3.4	109	4.3	100	5.0
Russian Federation	56	4.5	110	3.3	59	3.7	29	5.6	59	5.6
Latin America & Caribbean average		**4.2**		**3.6**		**3.2**		**4.7**		**5.4**
Southeast Asia average		**4.8**		**4.3**		**4.0**		**5.3**		**5.5**

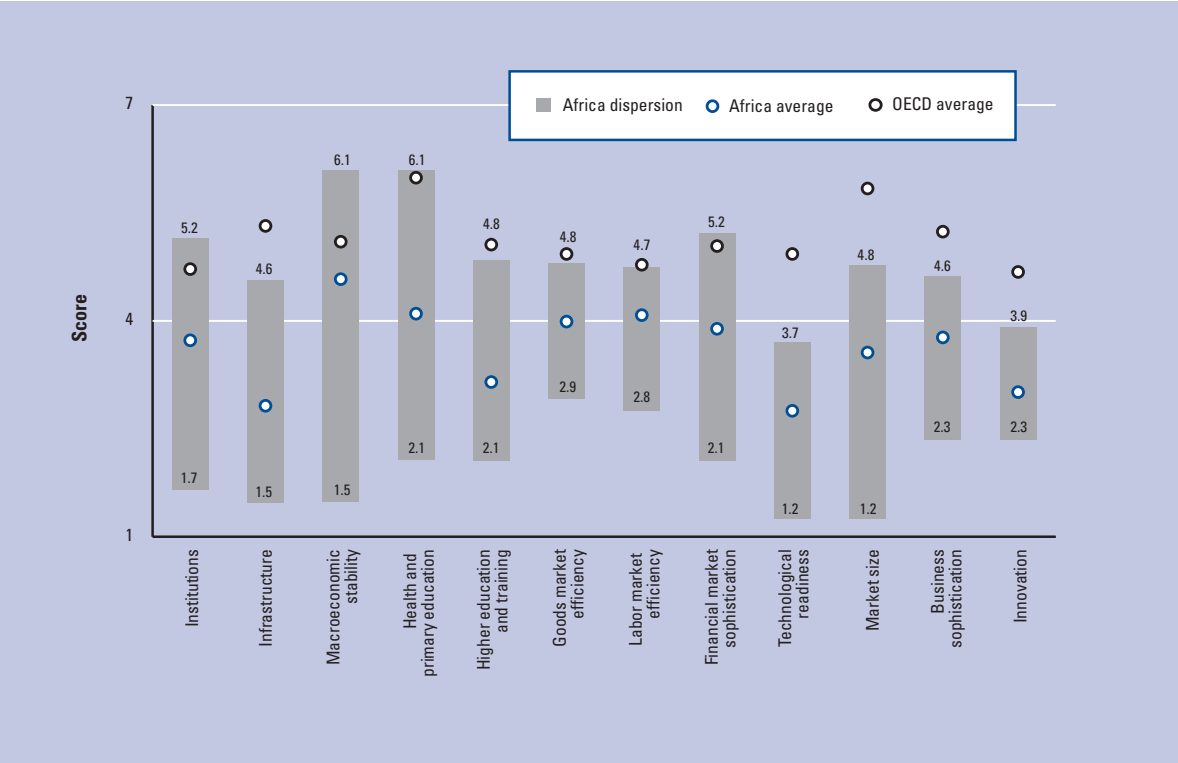
Table 6: The Global Competitiveness Index 2008–2009: Efficiency enhancers

Country/Region	EFFICIENCY ENHANCERS Rank	Score	5. Higher education and training Rank	Score	6. Goods market efficiency Rank	Score	7. Labor market efficiency Rank	Score	8. Financial market sophistication Rank	Score	9. Technological readiness Rank	Score	10. Market size Rank	Score
NORTH AFRICA														
Algeria	113	3.3	102	3.3	124	3.5	132	3.3	132	2.9	114	2.5	51	4.2
Egypt	88	3.7	91	3.6	87	4.0	134	3.3	106	3.7	84	3.0	27	4.7
Libya	114	3.3	75	3.8	121	3.6	133	3.3	131	3.0	98	2.8	77	3.3
Morocco	85	3.7	90	3.6	58	4.3	128	3.5	93	3.9	78	3.2	57	3.9
Tunisia	53	4.2	27	4.8	30	4.8	103	4.1	77	4.1	52	3.7	62	3.6
North Africa average		**3.6**		**3.8**		**4.0**		**3.5**		**3.5**		**3.0**		**3.9**
SUB-SAHARAN AFRICA														
Benin	123	3.2	114	3.0	107	3.8	118	3.9	99	3.7	113	2.5	123	2.3
Botswana	82	3.8	87	3.7	93	3.9	52	4.5	40	4.8	89	3.0	101	2.7
Burkina Faso	118	3.2	124	2.7	83	4.0	80	4.3	108	3.7	120	2.5	117	2.4
Burundi	133	2.7	130	2.5	128	3.4	95	4.1	134	2.8	131	2.2	131	1.4
Cameroon	120	3.2	121	2.8	108	3.8	114	3.9	124	3.2	110	2.6	89	3.1
Chad	134	2.7	134	2.1	134	2.9	119	3.8	133	2.8	134	2.1	113	2.4
Côte d'Ivoire	109	3.3	112	3.1	117	3.7	111	3.9	113	3.6	99	2.8	94	3.0
Ethiopia	121	3.2	126	2.7	116	3.7	74	4.3	127	3.1	132	2.2	76	3.3
Gambia, The	107	3.4	105	3.2	68	4.2	38	4.7	87	4.0	91	2.9	132	1.3
Ghana	95	3.5	111	3.1	97	3.9	108	4.0	69	4.3	115	2.5	86	3.1
Kenya	76	3.9	86	3.7	74	4.1	40	4.6	44	4.7	93	2.9	71	3.4
Lesotho	125	3.2	106	3.2	102	3.9	84	4.2	118	3.4	125	2.4	128	1.8
Madagascar	119	3.2	119	2.8	85	4.0	72	4.3	128	3.1	111	2.6	109	2.6
Malawi	101	3.4	116	2.9	84	4.0	42	4.6	62	4.4	127	2.3	121	2.3
Mali	122	3.2	122	2.8	95	3.9	94	4.1	120	3.3	105	2.6	119	2.4
Mauritania	130	2.9	133	2.4	126	3.4	112	3.9	126	3.1	102	2.7	126	1.9
Mauritius	66	4.0	67	4.0	40	4.6	65	4.4	32	5.0	55	3.6	110	2.5
Mozambique	129	3.1	129	2.6	127	3.4	98	4.1	122	3.3	116	2.5	107	2.6
Namibia	93	3.6	110	3.1	94	3.9	50	4.5	53	4.5	85	3.0	122	2.3
Nigeria	71	4.0	108	3.1	56	4.4	59	4.4	54	4.5	94	2.9	39	4.4
Senegal	96	3.5	92	3.4	60	4.3	120	3.8	111	3.6	81	3.1	105	2.7
South Africa	35	4.5	57	4.1	31	4.8	88	4.2	24	5.2	49	3.7	23	4.8
Tanzania	108	3.3	132	2.4	111	3.7	73	4.3	94	3.9	117	2.5	80	3.2
Uganda	106	3.4	120	2.8	114	3.7	25	4.7	102	3.7	121	2.4	96	2.8
Zambia	100	3.4	118	2.8	78	4.1	102	4.1	55	4.5	106	2.6	112	2.4
Zimbabwe	131	2.9	107	3.2	133	3.1	127	3.6	90	3.9	129	2.3	133	1.2
Sub-Saharan Africa average		**3.4**		**3.0**		**3.9**		**4.2**		**3.8**		**2.7**		**2.6**
BRICs														
Brazil	51	4.3	58	4.1	101	3.9	91	4.2	64	4.4	56	3.6	10	5.5
China	40	4.4	64	4.1	51	4.5	51	4.5	109	3.6	77	3.2	2	6.6
India	33	4.5	63	4.1	47	4.5	89	4.2	34	5.0	69	3.3	5	6.0
Russian Federation	50	4.3	46	4.4	99	3.9	27	4.7	112	3.6	67	3.4	8	5.7
Latin America & Caribbean average		**3.8**		**3.7**		**4.0**		**4.1**		**4.1**		**3.2**		**3.4**
Southeast Asia average		**4.3**		**4.1**		**4.5**		**4.8**		**4.5**		**3.6**		**4.2**

Table 7: The Global Competitiveness Index 2008–2009: Innovation and sophistication factors

	INNOVATION FACTORS		11. Business sophistication		12. Innovation	
Country/Region	Rank	Score	Rank	Score	Rank	Score
NORTH AFRICA						
Algeria	126	2.8	132	3.0	113	2.7
Egypt	74	3.5	77	3.9	67	3.2
Libya	102	3.2	101	3.5	100	2.8
Morocco	76	3.5	70	4.0	78	3.0
Tunisia	30	4.2	40	4.5	27	3.9
North Africa average		**3.5**		**3.8**		**3.1**
SUB-SAHARAN AFRICA						
Benin	100	3.2	103	3.5	95	2.9
Botswana	98	3.2	106	3.5	83	3.0
Burkina Faso	95	3.3	96	3.6	89	3.0
Burundi	125	2.9	127	3.2	123	2.5
Cameroon	108	3.1	108	3.4	108	2.7
Chad	131	2.7	129	3.1	130	2.3
Côte d'Ivoire	94	3.3	88	3.8	105	2.8
Ethiopia	114	3.0	122	3.3	109	2.7
Gambia, The	78	3.5	74	4.0	81	3.0
Ghana	107	3.1	98	3.6	114	2.6
Kenya	50	3.9	63	4.2	42	3.5
Lesotho	110	3.1	126	3.2	97	2.9
Madagascar	97	3.2	102	3.5	87	3.0
Malawi	101	3.2	104	3.5	94	2.9
Mali	99	3.2	111	3.4	79	3.0
Mauritania	120	2.9	114	3.4	125	2.5
Mauritius	69	3.6	55	4.3	80	3.0
Mozambique	127	2.8	128	3.1	120	2.5
Namibia	104	3.2	94	3.6	111	2.7
Nigeria	64	3.7	61	4.2	65	3.2
Senegal	59	3.7	65	4.2	59	3.3
South Africa	36	4.1	33	4.6	37	3.6
Tanzania	106	3.1	109	3.4	101	2.8
Uganda	90	3.3	97	3.6	72	3.1
Zambia	93	3.3	93	3.6	92	2.9
Zimbabwe	122	2.9	124	3.3	119	2.5
Sub-Saharan Africa average		**3.2**		**3.6**		**2.9**
BRICs						
Brazil	42	4.0	35	4.6	43	3.5
China	32	4.2	43	4.5	28	3.9
India	27	4.3	27	4.8	32	3.7
Russian Federation	73	3.6	91	3.7	48	3.4
Latin America & Caribbean average		**3.4**		**4.0**		**2.9**
Southeast Asia average		**3.9**		**4.3**		**3.5**

Figure 2: Score dispersion among African countries and OECD comparison



The biggest gaps in relation to the OECD, even compared with the best-performing countries in the region, relate to the quality of infrastructure and the level of technological readiness.

More generally, this analysis demonstrates the significant diversity among individual country performances within the continent in the various pillars. Table 8 shows the rankings of African countries in the 12 pillars of the Index, highlighting the three best performers in each case. As the table shows, Tunisia is one of the three highest-ranked countries in 8 of the 12 pillars, while Mauritius and South Africa are both among the top three in 7 pillars. Botswana is among the top three in 3 pillars, with Gambia and Kenya the only other two countries topping at least 2 of the pillars.

Botswana, Gambia, and Tunisia have notably strong institutional environments, ranked 36th, 38th, and 22nd, respectively, on a par with such countries as Korea, Rep., the United States, and Chile. These countries are characterized by transparent government policymaking, low levels of corruption, and high levels of confidence in the government more generally. Eight other countries from Africa are in the top half of the institutions ranking: Mauritius (39th), Egypt (52nd), Ghana (63rd), Malawi (51st), Morocco (61st), Namibia (42nd), South Africa (46th), and Zambia (67th). Having built up strong institutional environments by international standards, these countries provide examples to follow for other countries in Africa. The fact that 13 African countries are within the bottom third of the rankings in this area demonstrates the extent to which positive examples are critical for the region.

In terms of infrastructure, Mauritius, Namibia, and Tunisia are the top-ranked countries in Africa, ranked 43rd, 33rd, and 34th, respectively. These countries are characterized by good transportation infrastructure by regional standards, particularly their roads and ports. They are ranked higher than several European Union (EU) member countries, including the Czech Republic, Lithuania, and Hungary, and are joined in the top half of the ranking by Botswana (52nd), Egypt (60th), Gambia (62nd), and South Africa (48th). Yet the underdevelopment of infrastructure in most of the continent is reflected by the much lower ranks of most African countries highlighting the significant opportunities for its development in many African economies.

The top three performers in the macroeconomic stability pillar include two oil-exporting countries, Algeria and Libya (ranked 5th and 6th, respectively) as well as a country that has benefited from high commodities prices in recent years, Botswana (ranked 22nd). More generally, this is an area where a handful of coun-

Table 8: Top three African performers in each pillar of the GCI

Country	OVERALL Rank	1. Institutions Rank	2. Infra-structure Rank	3. Macro-economy Rank	4. Health and primary education Rank	5. Higher education and training Rank	6. Goods market efficiency Rank	7. Labor market efficiency Rank	8. Financial market sophistication Rank	9. Techno-logical readiness Rank	10. Market size Rank	11. Business sophistication Rank	12. Innovation Rank
Tunisia	36	**22**	**34**	75	**27**	**27**	**30**	103	77	**52**	62	**40**	**27**
South Africa	45	46	48	63	122	57	31	88	**24**	**49**	**23**	**33**	**37**
Botswana	56	**36**	52	**22**	112	87	93	52	**40**	89	101	106	83
Mauritius	57	39	**43**	117	**57**	**67**	**40**	65	**32**	**55**	110	**55**	80
Morocco	73	61	70	84	**71**	90	58	128	93	78	57	70	78
Namibia	80	42	**33**	27	118	110	94	50	53	85	122	94	111
Egypt	81	52	60	125	88	91	87	134	106	84	**27**	77	67
Gambia, The	87	**38**	62	99	119	105	68	**38**	87	91	132	74	81
Libya	91	65	112	**6**	103	75	121	133	131	98	77	101	100
Kenya	93	93	91	107	108	86	74	**40**	44	93	71	63	**42**
Nigeria	94	106	120	26	126	108	56	59	54	94	**39**	61	65
Senegal	96	83	83	103	109	92	60	120	111	81	105	65	59
Algeria	99	102	84	**5**	76	102	124	132	132	114	51	132	113
Ghana	102	63	82	121	115	111	97	108	69	115	86	98	114
Benin	106	85	106	95	110	114	107	118	99	113	123	103	95
Côte d'Ivoire	110	130	73	69	127	112	117	111	113	99	94	88	105
Zambia	112	67	116	102	128	118	78	102	55	106	112	93	92
Tanzania	113	76	118	108	117	132	111	73	94	117	80	109	101
Cameroon	114	116	117	34	125	121	108	114	124	110	89	108	108
Mali	117	79	107	94	130	122	95	94	120	105	119	111	79
Malawi	119	51	119	129	120	116	84	42	62	127	121	104	94
Ethiopia	121	77	103	119	123	126	116	74	127	132	76	122	109
Lesotho	123	114	125	39	129	106	102	84	118	125	128	126	97
Madagascar	125	94	114	127	104	119	85	72	128	111	109	102	87
Burkina Faso	127	75	104	120	131	124	83	80	108	120	117	96	89
Uganda	128	113	115	92	133	120	114	**25**	102	121	96	97	72
Mozambique	130	112	124	112	132	129	127	98	122	116	107	128	120
Mauritania	131	107	127	126	114	133	126	112	126	102	126	114	125
Burundi	132	124	129	124	124	130	128	95	134	131	131	127	123
Zimbabwe	133	126	88	134	113	107	133	127	90	129	133	124	119
Chad	134	133	134	97	134	134	134	119	133	134	113	129	130
Global leader		Singapore	Germany	Kuwait	Finland	Finland	Singapore	United States	Hong Kong SAR	Nether-lands	United States	Germany	United States

tries do quite well (Cameroon, Lesotho, Namibia, and Nigeria are all in the top third of the ranking), although most continue to struggle, leading to the significant spread in scores as shown in Figure 2. With comparatively high inflation, high budget deficits, and continuing high debt in many countries, greater fiscal and monetary responsibility is in order.

Table 8 shows that health and primary education are among the greatest concerns for Africa, given that among the top three regional performers—Mauritius, Morocco, and Tunisia—only two of them, Tunisia and Mauritius, are ranked in the top half of countries in this pillar. In fact, 26 countries (or 84 percent of African countries) are in the bottom third of the ranking, with many rounding out the very bottom group. Poor health indicators related in large part to high rates of communicable diseases, low primary education enrollment, and poor assessments of most national primary educational systems explain this poor result. This is arguably the area requiring the most urgent attention for improving Africa's competitiveness at the aggregate.

The situation with regard to higher education and training echoes that of the previous pillar, although the spread between the most and least successful countries in this area is smaller. The top three ranked countries are Mauritius, South Africa, and Tunisia. However, of these three, only Tunisia is ranked in the top third of all countries, demonstrating the quite low rankings for countries from the region overall in this pillar. It is perhaps not surprising that secondary and university enrollment rates and the assessment of the quality of higher education remain weak in the region, given that the primary educational base on which to build has not yet been put into place in most countries. This will be a critical area for attention as countries move up the value chain toward more complex production.

The situation is somewhat more positive with regard to goods market efficiency. The top three countries, Mauritius, South Africa, and Tunisia, have goods

markets that are similar to countries such as Spain and Chile in their efficiency, although all remain below the average of OECD countries shown in Figure 2. Tunisia and South Africa, in particular, are characterized by high levels of competition in the market, taxation systems that are not distortive to business decisions, and agricultural sectors that are not very costly to the economy (unlike in many industrialized countries). Yet it is clear that most countries in Africa remain hobbled by regulations and other factors that diminish the efficiency with which goods and services are traded in their economies. Only three other countries are in the top half of the ranking in this pillar: Morocco, Nigeria, and Senegal. Eighteen African countries are in the bottom third of the rankings. Much can be done in the region to inject more competition into markets and make starting a business in the region less arduous.

Labor markets constitute another area where a few countries stand out for their comparatively good performance while most lag behind. Uganda is particularly well rated—it is 1st in the region and 25th out of 134 countries. Gambia (38th) and Kenya (40th) are the two other African countries with the most efficient labor markets. These three countries are characterized by flexible hiring and firing practices and relatively low nonwage labor costs in particular. Only five other countries are in the top half of the rankings in this area, namely Botswana, Malawi, Mauritius, Namibia, and Nigeria, with the labor markets in most African countries among the least flexible and efficient in the world. Much must be done on the continent to free Africa's labor markets and unleash the potential of the region's workers.

Financial markets in Africa are characterized by significant disparities in terms of sophistication levels. South Africa, ranked 1st in the region and 24th overall, has highly sophisticated financial markets, on a par with Belgium and France, with relatively easy access to capital from various sources, sound banks, and a well-regulated securities market. Although their financial markets are less sophisticated than that of South Africa, Botswana and Mauritius also are ranked in the top third in this pillar, well ahead of most other countries in the region. Five other countries have financial markets that are placed in the top half of the rankings: Kenya, Malawi, Namibia, Nigeria, and Zambia. Yet overall this is clearly another area in crucial need of development to ensure that financial resources in these countries are allocated to their best use. It is notable that the four lowest-ranked countries in this pillar are from Africa, two from North Africa (Libya and Algeria) and two from sub-Saharan Africa (Chad and Burundi), showing that this is a problem for both the North and the South of the continent. Chapters 1.2 and 1.3 analyze Africa's financial markets in detail.

As Figure 2 shows, technological readiness is an area where African countries do quite poorly overall and where they are well behind the OECD average. As shown in Table 8, the highest-ranked country in this area is South Africa at a relatively low 49th place, followed by Tunisia (52nd) and Mauritius (55th). No other African country is in the top half of the rankings, and in fact 24 of them are in the bottom third. This is a reflection of the very low penetration rates of these new tools on the continent, related in part to the low prioritization given by many governments to encouraging information communication technologies (ICT) and other new technology adoption, as well as low educational attainment. Given the significant potential of new technologies for information exchange and productivity enhancement, this is another clear area requiring urgent attention.

The size of markets also varies greatly among African countries. Table 8 highlights the three largest markets: those of South Africa, Egypt, and Nigeria. These three countries benefit from economies of scale afforded by significant domestic and foreign (trade) markets. While many African countries clearly cannot simply enlarge their domestic market size, they could do more to open their markets to trade and thus benefit from an enlarged foreign market size. There are many overlapping regional trade arrangements currently in place on the continent, most of which have met with mixed success at best. Trade barriers remain endemic in the region. See Chapter 1.5 of this *Report* for further analysis of what African countries could do to enable greater trade.

Business sophistication is not yet an area of keen concern for most African countries, since they can still greatly improve their productivity and competitiveness by improving on the more basic areas discussed above. However, for the small number of African countries that are nearing the transition to the most advanced stage of development, this area will become increasingly important. It is thus heartening to note that the top three countries in this pillar, Mauritius, South Africa, and Tunisia, are classified in the efficiency-driven stage and therefore are nearing the stage when these more complex factors will become very important.

Finally, Kenya, South Africa, and Tunisia are the top regional performers with respect to innovation, on a par with such innovative countries as India and Brazil. These countries have high-quality scientific research institutions, invest strongly in research and development, and are characterized by a significant level of collaboration between business and universities in research. Egypt, Nigeria, and Senegal are also in the top half of the rankings in this pillar, demonstrating the existing potential for innovation in Africa. The low rankings of the other countries from the region should not be of significant concern at this stage given the importance of focusing on the more basic areas for improvement first.

The overall picture is that strong area-specific performances are concentrated among a relatively small group of countries, although pockets of excellence exist in a number of other African countries. This demonstrates

that Africa is home to a number of countries that provide excellent best practice examples in the various areas for the other African countries struggling to improve their competitiveness. A number of these examples are highlighted in Chapters 1.3 and 1.6 of this *Report*.

Identifying competitive strengths and weaknesses in Africa

Comparing scores and ranks across countries, as demonstrated in the previous section, is interesting and useful for providing a general picture of the region's competitiveness. However, it does not make it possible to pinpoint with precision the relative strengths and weaknesses of each country in Africa's competitiveness. The Executive Opinion Survey (Survey), as mentioned above, provides a unique set of data permitting this exercise. In this section we rank each of the 77 Survey variables included in the GCI for each country and report the top five and the bottom five variables, that is, those that receive the best and worst assessments.

This is an analysis that removes potential national-level biases and interpretations of the data and that can be interpreted as the "revealed" prioritization of the business community in the areas requiring the most urgent attention in their country.

Table 9 displays the five survey variables with the best scores and those with the five worst scores for all of the African countries under analysis, as well as the averages for North Africa and sub-Saharan Africa. In addition to showing the names of the variables, each variable in the table is color coded based on the subindex to which it is attributed, and therefore the extent to which the individual indicator is important for a country at a given stage of development (and thus whether the variable is, in fact, important for improving that country's competitiveness in the short term).

As the table shows, there does seem to be a sense among business communities in African countries that the most important issues to be addressed are those important for the country's stage of development. Most of the countries indicating weaknesses in the most advanced innovation and sophistication factors are those that have begun to move up the value chain and to more advanced stages of development.

With regard to overall regional areas of strength, in North Africa various aspects of crime and violence, including terrorism, are not seen as impediments to competitiveness. In addition, the perception exists that diseases such as malaria and tuberculosis do not impose significant costs on businesses. As the table shows, the variable most present among the top five scores across the North African countries is the business impact of malaria, reinforcing the extent to which this is not seen as a problem in the subregion, most likely for climatic reasons.

Sub-Saharan African business leaders also see the threat of terrorism as a non-issue, and this is both the variable with the highest score as well as the most frequent appearance among the top five issue areas. In addition, rules encouraging FDI are seen as helpful, and wages are flexibly determined. It is also notable that the solvency of banks is perceived to be a strength, particularly important at a time when this is a major concern in both industrialized and developing countries.

With regard to competitive weaknesses, the main concerns, on average, of North African countries relate to the quality of human resources, particularly the loss of the best and the brightest minds to other countries through brain drain and the lack of Internet access in schools. Railroad infrastructure quality is deemed a weakness as well. In addition, business leaders in these countries are concerned about some issues related to business sophistication and innovation, and the capacity for innovation is the issue that appears most often among the bottom five scores across all North African countries.

Sub-Saharan African business leaders also indicate a lack of Internet access in schools and the poor quality of railroad infrastructure as among their main concerns. In addition, they point to a lack of available capital through loans and venture capital as bottlenecks. It is also notable that in sub-Saharan Africa one of the most significant problems is seen to be a lack of public trust in politicians.

The main concerns for each of these countries are echoed by the findings of a specific question in the Executive Opinion Survey, which asks business leaders to rank the top difficulties they face in doing business in their countries. Although covering a more restricted number of issues, and addressing the issue from a somewhat different perspective, the similarities are striking. The results per country can be found in the Competitiveness Profiles of this *Report*. In addition, an analysis of the trends in African competitiveness are considered in Box 2.

The competitiveness of selected African countries

This section carries out a more detailed analysis of the competitiveness of individual African countries, with some comparisons made to the results from the previous year.[10] Country names are in bold, allowing readers to locate the discussions of those countries of particular interest.

As mentioned above, **Tunisia** tops the rankings among the African countries, at 36th position. The country's institutions, which have been favorably assessed for a number of years, are one of its major competitive advantages. They rest on fairly transparent and trustworthy relations between the government and civil society as expressed in the high public trust of politicians (16th), a favorable assessment of the efficiency of government spending (2nd), and transparent policies (15th), as well as

Table 9: Best and worst scores in GCI 2008, 2009 Survey data

Basic requirements | Efficiency enhancers | Innovation and sophistication factors

Country/Region	BEST FIVE SCORES					WORST FIVE SCORES				
North Africa	Business impact of malaria	Organized crime	Business impact of tuberculosis	Business costs of crime and violence	Business costs of terrorism	Internet access in schools	University-industry research collaboration	Brain drain	Quality of railroad infrastructure	Capacity for innovation
Sub-Saharan Africa	Business costs of terrorism	Soundness of banks	Prevalence of foreign ownership	Business impact of rules on FDI	Flexibility of wage determination	Ease of access to loans	Venture capital availability	Public trust of politicians	Internet access in schools	Quality of railroad infrastructure
Algeria	Business impact of malaria	Business impact of HIV/AIDS	Business impact of tuberculosis	Organized crime	Availability of scientists and engineers	Internet access in schools	Ease of access to loans	Venture capital availability	Financial market sophistication	Capacity for innovation
Benin	Soundness of banks	Flexibility of wage determination	Business costs of terrorism	Reliability of police services	Prevalence of foreign ownership	Internet access in schools	Venture capital availability	Ease of access to loans	Quality of electricity supply	Quality of railroad infrastructure
Botswana	Soundness of banks	Business costs of terrorism	Restriction on capital flows	Prevalence of foreign ownership	Business impact of rules on FDI	Value chain breadth	Company spending on R&D	Capacity for innovation	Business impact of HIV/AIDS	Internet access in schools
Burkina Faso	Soundness of banks	Business costs of terrorism	Business impact of rules on FDI	Local supplier quantity	Business impact of tuberculosis	Public trust of politicians	Quality of railroad infrastructure	Internet access in schools	Ease of access to loans	Venture capital availability
Burundi	Flexibility of wage determination	Business impact of tuberculosis	Efficacy of corporate boards	Degree of customer orientation	Soundness of banks	Brain drain	Quality of roads	Public trust of politicians	Quality of overall infrastructure	Internet access in schools
Cameroon	Business costs of terrorism	Soundness of banks	Prevalence of foreign ownership	Local supplier quantity	FDI and technology transfer	Ease of access to loans	Internet access in schools	Public trust of politicians	Financial market sophistication	Diversion of public funds
Chad	Flexibility of wage determination	Local supplier quantity	Soundness of banks	Business costs of terrorism	Prevalence of foreign ownership	Quality of roads	Diversion of public funds	Internet access in schools	Quality of overall infrastructure	Quality of electricity supply
Côte d'Ivoire	Prevalence of foreign ownership	Business impact of rules on FDI	Soundness of banks	Firm-level technology absorption	Flexibility of wage determination	Quality of railroad infrastructure	Judicial independence	Venture capital availability	Public trust of politicians	Ease of access to loans
Egypt	Business impact of malaria	Organized crime	Business impact of tuberculosis	Business impact of HIV/AIDS	Business costs of crime and violence	Internet access in schools	Buyer sophistication	Quality of the educational system	Quality of primary education	Brain drain
Ethiopia	Organized crime	Business costs of terrorism	Business costs of crime and violence	Flexibility of wage determination	Quality of air transport infrastructure	Financial market sophistication	Venture capital availability	Ease of access to loans	Internet access in schools	Quality of railroad infrastructure
Gambia, The	Business costs of terrorism	Prevalence of foreign ownership	Organized crime	Business impact of rules on FDI	Soundness of banks	Capacity for innovation	Brain drain	Venture capital availability	Internet access in schools	Company spending on R&D
Ghana	Business costs of terrorism	Soundness of banks	Prevalence of trade barriers	Prevalence of foreign ownership	Organized crime	Venture capital availability	Capacity for innovation	Company spending on R&D	Production process sophistication	Quality of railroad infrastructure
Kenya	Soundness of banks	Prevalence of foreign ownership	FDI and technology transfer	Local supplier quantity	Flexibility of wage determination	Extent and effect of taxation	Favoritism in decisions of gov't officials	Quality of railroad infrastructure	Internet access in schools	Public trust of politicians
Lesotho	Business impact of malaria	Prevalence of foreign ownership	Business impact of rules on FDI	Business costs of terrorism	Flexibility of wage determination	Quality of air transport infrastructure	Quality of overall infrastructure	Business impact of HIV/AIDS	Quality of roads	Quality of railroad infrastructure
Libya	Organized crime	Business costs of terrorism	Business costs of crime and violence	Business impact of malaria	Business impact of tuberculosis	Financing through local equity market	Capacity for innovation	Financial market sophistication	Internet access in schools	Quality of railroad infrastructure

(Cont'd.)

Table 9: Best and worst scores in GCI 2008, 2009 Survey data *(cont'd.)*

Basic requirements | Efficiency enhancers | Innovation and sophistication factors

Country/Region	BEST FIVE SCORES					WORST FIVE SCORES				
Madagascar	Soundness of banks	Business costs of terrorism	Flexibility of wage determination	Prevalence of foreign ownership	Degree of customer orientation	Financing through local equity market	Internet access in schools	Public trust of politicians	Quality of electricity supply	Quality of railroad infrastructure
Malawi	Business costs of terrorism	Soundness of banks	Organized crime	Flexibility of wage determination	Business impact of rules on FDI	Quality of overall infrastructure	Venture capital availability	Production process sophistication	Quality of railroad infrastructure	Internet access in schools
Mali	Business costs of terrorism	Soundness of banks	FDI and technology transfer	Business impact of rules on FDI	Intensity of local competition	State of cluster development	Public trust of politicians	Venture capital availability	Ease of access to loans	Quality of railroad infrastructure
Mauritania	Flexibility of wage determination	Organized crime	Cooperation in labor-employer relations	Local supplier quantity	Business costs of terrorism	Value chain breadth	Quality of overall infrastructure	Quality of roads	Internet access in schools	Quality of railroad infrastructure
Mauritius	Business costs of terrorism	Business impact of malaria	Business impact of tuberculosis	Organized crime	Soundness of banks	Brain drain	Company spending on R&D	Extent of market dominance	Public trust of politicians	Capacity for innovation
Morocco	Business impact of malaria	Quality of electricity supply	Soundness of banks	Flexibility of wage determination	Business impact of rules on FDI	Company spending on R&D	Venture capital availability	Quality of the educational system	Capacity for innovation	University-industry research collaboration
Mozambique	Business costs of terrorism	Soundness of banks	Prevalence of foreign ownership	Business impact of rules on FDI	FDI and technology transfer	Venture capital availability	Public trust of politicians	Quality of overall infrastructure	Quality of roads	Quality of railroad infrastructure
Namibia	Soundness of banks	Business costs of terrorism	Property rights	Strength of auditing & reporting standards	Judicial independence	Capacity for innovation	University-industry research collaboration	Internet access in schools	Quality of management schools	Hiring and firing practices
Nigeria	Financing through local equity market	Prevalence of foreign ownership	Flexibility of wage determination	Intensity of local competition	Business impact of rules on FDI	Ease of access to loans	Favoritism in decisions of gov't officials	Quality of electricity supply	Public trust of politicians	Quality of railroad infrastructure
Senegal	Business costs of terrorism	Soundness of banks	Degree of customer orientation	Firm-level technology absorption	Organized crime	Public trust of politicians	Brain drain	Venture capital availability	Ease of access to loans	Quality of railroad infrastructure
South Africa	Soundness of banks	Financial market sophistication	Business costs of terrorism	Strength of auditing & reporting standards	Regulation of securities exchanges	Quality of primary education	Hiring and firing practices	Quality of math and science education	Business impact of HIV/AIDS	Business costs of crime and violence
Tanzania	Business costs of terrorism	Organized crime	Business impact of rules on FDI	Prevalence of foreign ownership	Soundness of banks	Quality of overall infrastructure	Venture capital availability	Quality of electricity supply	Quality of railroad infrastructure	Internet access in schools
Tunisia	Business impact of malaria	Business impact of tuberculosis	Business impact of HIV/AIDS	Business costs of terrorism	Business impact of rules on FDI	State of cluster development	Brain drain	Nature of competitive advantage	Capacity for innovation	Company spending on R&D
Uganda	Flexibility of wage determination	Prevalence of foreign ownership	Business impact of rules on FDI	Restriction on capital flows	Hiring and firing practices	Favoritism in decisions of gov't officials	Internet access in schools	Public trust of politicians	Quality of electricity supply	Quality of railroad infrastructure
Zambia	Business costs of terrorism	Prevalence of foreign ownership	Business impact of rules on FDI	Organized crime	Soundness of banks	Public trust of politicians	Brain drain	Quality of overall infrastructure	Internet access in schools	Quality of railroad infrastructure
Zimbabwe	Business costs of terrorism	Organized crime	Reliance on professional management	Strength of auditing & reporting standards	Financing through local equity market	Brain drain	Wastefulness of gov't spending	Agricultural policy costs	Restriction on capital flows	Public trust of politicians

Box 2: Trends in African Competitiveness

In this section we take Africa's competitiveness analysis back a bit further, looking at the trends over the past five years, the period over which we have calculated the Global Competitiveness Index. For purposes of this analysis, we look at the underlying scores (on a scale of 1 to 7) over the period, as the ranks are not comparable across years because of large changes in sample size.

The table below shows that between 2004 and 2008, most African countries' scores remained stable or improved. On average, the score for the African countries shown in the table went up from 3.5 to 3.7. Within North Africa, Algeria and Egypt had the same scores at the beginning and the end of the period. Morocco improved slightly (from 4.0 to 4.1) and Tunisia improved slightly more (from 4.3 to 4.6).

The improvement among sub-Saharan African countries is in many cases more striking, in line with the improving economic climate in recent years. Two countries improve their score by a full half-point: Botswana and Ethiopia. Two countries improve by 0.4: Gambia and Kenya. Six countries improve by 0.3: Mali, Mauritius, Nigeria, South Africa, Tanzania, and Tunisia. Chad, Madagascar, Morocco and Mozambique also saw a slight improvement over the period and all other countries remained stable in their score, with the exception of Uganda, which saw a slight decrease by 0.2.

Overall the picture is therefore a positive one for Africa's competitiveness over recent years. But where is the improvement coming from?

Table 1: Historical overall Global Competitiveness Index scores, 2004–08

Country	2004	2005	2006	2007	2008
Algeria	3.7	3.8	3.9	3.9	3.7
Botswana	3.7	4.0	4.1	4.0	4.2
Chad	2.7	2.7	2.8	2.8	2.8
Egypt	4.0	3.9	4.0	4.0	4.0
Ethiopia	2.9	3.0	3.3	3.3	3.4
Gambia, The	3.5	3.2	3.5	3.6	3.9
Kenya	3.4	3.4	3.7	3.6	3.8
Madagascar	3.3	3.1	3.3	3.4	3.4
Mali	3.1	3.1	3.3	3.4	3.4
Mauritius	3.9	3.9	4.2	4.2	4.2
Morocco	4.0	3.9	4.1	4.1	4.1
Mozambique	3.0	2.9	3.2	3.0	3.1
Namibia	4.0	3.8	4.0	3.8	4.0
Nigeria	3.5	3.7	3.6	3.7	3.8
South Africa	4.1	4.4	4.5	4.4	4.4
Tanzania	3.2	3.3	3.6	3.6	3.5
Tunisia	4.3	4.4	4.6	4.6	4.6
Uganda	3.5	3.4	3.4	3.3	3.3
Zimbabwe	2.9	3.0	3.3	2.9	2.9
Africa average	**3.5**	**3.5**	**3.7**	**3.7**	**3.7**

A closer look at the performance of African countries across the 12 issue areas measured by the GCI shows that there are five areas in particular where Africa as a whole has improved steadily over the five-year period. The most significant improvement has been in goods market efficiency, where, on average, the continent improved by 0.8 overall. This progress is linked to efficiencies ushered in by the opening of markets in the region and improvements to the business environment. Specifically, over the period the number of procedures and time required for starting a business were reduced across many countries, and indeed, several African countries are assessed as having increased competition in the national market for goods and services. This has been even more marked in sub-Saharan Africa than in the North African countries.

There is also an improvement in the measured quality and quantity of higher education and training, up by 0.5 over the period, although admittedly from a low base. There have been steadily higher enrollment rates in many countries, especially at the secondary but also at the tertiary level, and several countries register an improvement in staff on-the-job training, particularly in sub-Saharan Africa.

An improvement in the efficiency of the functioning of labor markets can also been seen in the figure. Several sub-Saharan African countries have especially noted a tighter relationship between pay and worker productivity in their countries over the period.

The sophistication of business practices is also moving in the right direction overall, as shown by the figure. Several countries have seen an improvement in the quantity and quality of local suppliers, and production processes are slowly becoming more sophisticated in some areas.

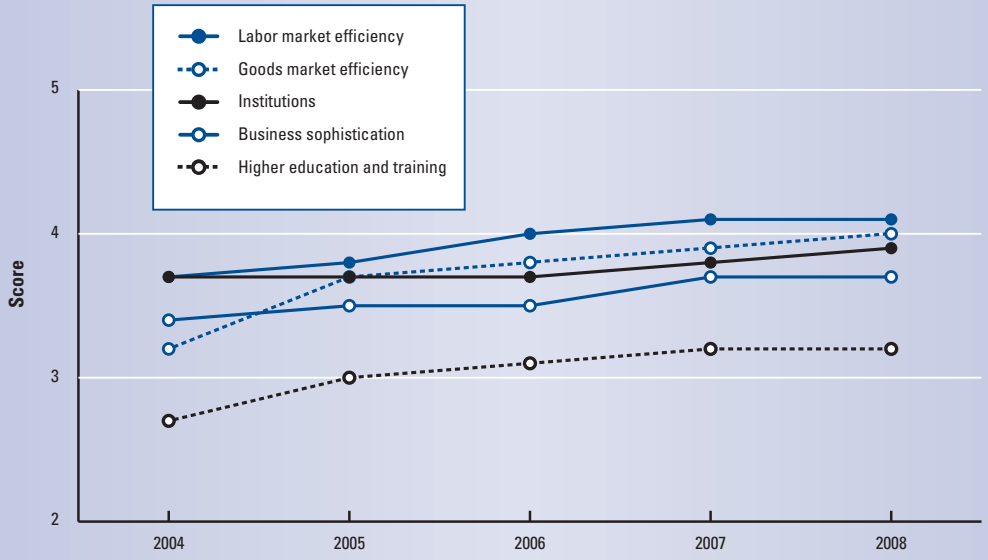
Finally, the quality of institutions has also improved somewhat on average. This trend is more marked in sub-Saharan Africa than in the North of the continent. In a number of countries, the business community perceives that there has been greater government efficiency, slightly higher levels of physical security, and less corruption in recent years.

On the other hand, it must be noted that there are some areas where there has been no improvement or the assessment has become worse over the years. These include infrastructure, macroeconomic stability, and the health situation (particularly in sub-Saharan Africa). These are areas of critical importance to Africa's competitiveness given the stage of development of most of its countries, and thus require urgent policy responses.

It is presently not possible to explore the relationship between the GCI and the impact of the economic crisis on African countries, given the lag in data collection. However, this should be possible in future editions of the Index and constitutes an interesting area for future research. This will provide a sense of the extent to which the more competitive economies are indeed better able to weather the storm. In the meantime, Chapters 1.2, 1.3, and 1.5 look particularly into some of the shorter-term fundamental issues related to the present situation for Africa: finance and trade.

Box 2: Trends in African Competitiveness *(cont'd.)*

Figure 1: African average performance in improvement areas



limited favoritism on the part of government officials (14th). A well-functioning health and educational system, as well as sound levels of domestic competition (34th) and a strong innovative capacity (27th), round out the positive picture. Moving forward, Tunisia will need to focus on reforming its rigid labor market (ranked 103rd) and further streamlining its macroeconomic management in order to improve its competitive position. In addition, as shown in Table 9, as the country begins to move toward the innovation driven stage of development, it will need to improve on various aspects of its innovative capacity.

South Africa, ranked 45th overall, remains the highest-ranked country in sub-Saharan Africa, with a very stable performance. Among the country's strengths is the large size of its economy, particularly by regional standards (ranked 23rd in the market size pillar). The country continues to receive good marks in more complex areas measured by the GCI, such as intellectual property protection (23rd), the quality of private institutions (25th), and goods market sophistication (31st), as well as financial market efficiency (24th), business sophistication (33rd), and innovation (37th). South Africa benefits from high spending on R&D, accompanied by strong collaboration between universities and the business sector in innovation (both ranked 28th). It is thus not surprising that in recent years the country has a higher rate of patenting than a number of European countries. These combined strengths explain South Africa's position at the top of the regional ranking.

However, South Africa does face a number of obstacles to competitiveness. For example, the country ranks 88th in labor market flexibility, which encompasses hiring and firing practices (129th), flexibility of wage determination (123rd), and the poor labor-employer relations (119th). Further, the country's innovative potential could be at risk with a university enrollment rate of only 15 percent, which places the country 93rd overall. South Africa's infrastructure, although good by regional standards, requires upgrading (ranked 48th): there are particular concerns about the quality of the electricity supply, which has been getting worse in recent years (ranked 101st, down from 83rd last year), and the short supply of telephone lines. The poor security situation remains another important obstacle to doing business in South Africa. The business costs of crime and violence (134th) and the sense that the police are unable to provide protection from crime (109th) are highlighted as particular concerns. The greatest concern, however, remains the health of the workforce, ranked 129th out of 134 countries, the result of high rates of communicable diseases and poor health indicators more

generally. These are areas that must be tackled in order to improve South Africa's competitiveness outlook.

Botswana, ranked 56th, follows only South Africa in sub-Saharan Africa. The country regains its position this year in the top half of the rankings, moving up a remarkable 20 places. This is partly explained by the fact that the GCI is beginning to weight more heavily those complex factors from which Botswana derives its competitive strengths. The government has succeeded in using its wealth from key natural resources to invest in factors that have set it on a more sustainable growth trajectory. Among the country's strengths are its reliable and legitimate institutions, ranking a high 21st worldwide for the efficiency of government spending, 22nd for public trust of politicians, and 26th for judicial independence. Botswana is rated as the country with the lowest corruption in Africa (22nd out of 134 countries). Over past years, the transparency and accountability of public institutions have contributed to a stable macroeconomic environment, and this is one key area of improvement: the government has been running a healthy budget surplus, which is allowing it to reduce debt levels, and inflation has also decreased from its 2006 peak.

Botswana's primary weaknesses are related to the country's human resources base. Despite high spending on education, educational attainment rates at all levels of the educational ladder remain low by international standards, and the quality of the educational system receives mediocre marks. Yet it is clear that by far the biggest obstacle facing Botswana in its efforts to improve its competitiveness is the health situation in the country. Botswana has the highest HIV prevalence rate of all countries covered, as well as very high malaria (111th) and tuberculosis (128th) incidence. However, these rates are for the most part coming down, leading to an improvement in life expectancy from 40 to 52 years by the most recent estimate. Continuing to improve the health and educational levels of the workforce will remain the main priorities for the government for some time.

Mauritius has seen an improvement of three places since last year, moving up to 57th position and following Botswana directly in the ranking. The country is characterized by strong and transparent public institutions, with well-protected property rights (ranked 22nd), reasonable levels of judicial independence, and a security situation that is good by regional standards (37th). Private institutions are rated as accountable and improving, with strong auditing and accounting standards and a system that protects minority shareholders' interests. The country's infrastructure is well developed by regional standards, and goods and financial markets function well, ensuring an efficient allocation of resources in the country.

However, efforts will be required in the area of education. Educational attainment rates remain low, particularly at the university level (placing Mauritius 90th), education spending remains low, and the educational system gets mediocre marks for quality. Beyond the educational weaknesses, labor markets could be made more flexible, with stringent hiring and firing laws (110th) and wages that are not flexibly determined (118th). Furthermore, there are some health concerns with regard to the workforce—particularly the high prevalence of HIV. Finally, Mauritius must work to improve the stability of the macroeconomic environment going forward (ranked 117th), with a government budget deficit that places the country 115th (which has led to the buildup of significant national debt and high interest rates).

Morocco has fallen by nine ranks this year to 73rd place, in line with the deteriorating performance of North Africa as a whole. In the case of Morocco, a weakening security environment and a deteriorating assessment of the quality of the educational system contribute to the country's declining competitive position. At the same time, the macroeconomic environment—traditionally one of the country's weaknesses—has improved as a result of laudable efforts to curb inflation, control spending, and streamline the tax collection system.[11] The country also boasts a regulatory environment that is conducive to business activity and to business creation, ranking 19th and 22nd for the number of procedures and time required to start a business. At the same time, the rigid labor market, assessed at a low 128th rank, remains a serious drag on the country's competitiveness.

Namibia has moved up nine ranks to 80th place this year, with improvements across many of the areas measured by the GCI. Among Namibia's comparative strengths is the quality of the institutional environment (ranked 42nd). Property rights are well protected (ranked 25th) and the judiciary is perceived as independent from undue influence (22nd). With regard to private institutions, auditing and accounting standards are strong and minority shareholders' interests are well protected. The country's strong institutional environment continues to contribute to responsible macroeconomic management. The government budget remained in surplus between 2006 and 2007, helping to significantly relieve the country's debt burden, although rising inflation still remains high by international standards (ranked 83rd on this indicator). The quality of the country's infrastructure, most particularly the transport infrastructure, is also excellent by regional standards (ranked 33rd).

With regard to weaknesses, Namibia's health and education indicators are worrisome, with the country ranked a low 124th on the health subpillar. The country is characterized by high infant mortality and low (albeit rising) life expectancy, the result in great part of the high prevalence rates of HIV and malaria (ranked 130th and 129th, respectively) as well as the second-to-highest incidence of tuberculosis of all 134 countries. On the educational side, attainment rates remain low, with primary, secondary, and tertiary enrollment rates placing the country 114th, 103rd, and 112th, respectively. The

quality of the educational system is assessed as being among the worst of all countries in the Index, ranked 114th overall, despite high per capita spending on education. In addition, Namibia's goods markets suffer from a number of distortions, such as a long time required for starting a business (99 days, placing the country 122nd), ineffective antitrust policy, and poor customer orientation. Finally, the country could do more to harness new technologies to improve its productivity levels. Companies are not considered to be sufficiently aggressive in absorbing new technologies, and Namibia has low penetration rates of new technologies such as mobile phones and the Internet.

Egypt ranks 81st in this year's edition of the GCI, down four places since last year. Despite some improvements, macroeconomic instability remains a major challenge for the government, as mirrored in the very low 125th rank the country obtains on this pillar. High government debt, double-digit inflation, and a still high—although decreasing—budget deficit continue to weaken the macroeconomic environment, despite improving fiscal management.[12] In addition, labor market efficiency is poor in international comparison, ranked last among all 134 countries. Firing costs (119th), a significant brain drain of the country's talent (129th), and reliance on friends and relatives for professional management positions (124th) are the most important weaknesses in this context.

At the same time, Egypt has made progress in fostering technological readiness (84th), although the increased penetration of the latest technologies—such as the Internet, personal computers, and mobile phones—has not been sufficient for the country to improve in the rankings, as other countries are progressing more quickly. To further benefit from internationally available technology, Egypt will need to upgrade its educational institutions, which continue to receive weak assessments (124th).

Libya ranks 91st, down three positions since last year. Benefiting from increasing exports of hydrocarbons, the country boasts one of the strongest macroeconomic environments in the world (ranked 6th). The high government surplus and low government debt contribute to this good assessment. Yet mounting inflationary pressures are putting the country's macroeconomic stability at risk. Although educational enrollment rates overall are satisfactory, the curricula need to be overhauled to become more in line with the needs of present economic realities: the quality of the educational system receives one of the weakest assessments among all countries covered (121st). Similarly, the quality of infrastructure is assessed as dismal, in particular air transport (126th), ports (110th), and railroads (116th). In this context, to improve its competitiveness, significant investments should be made in structural improvements such as upgrading the educational system and transport infrastructure.

Notwithstanding the post-election political and social turmoil ravaging the country earlier in the year, **Kenya** (ranked 93rd overall) has moved up by six places this year, with its key strengths found in the more complex areas normally reserved for countries at higher stages of development. For example, Kenya's innovative capacity is ranked an impressive 42nd, with high company spending on research and development and good scientific research institutions collaborating well with the business sector in research activities. Supporting this innovative potential is an educational system that—although educating a relatively small proportion of the population compared with most other countries (primary, secondary, and tertiary enrollment rates are ranked 116th, 108th, and 126th, respectively)—gets good marks for quality (33rd) for those attending schools. The economy is also supported by financial markets that are sophisticated by international standards (44th), with relatively easy access to loans and share issues on the local stock market.

However, there are a number of basic weaknesses that are eroding Kenya's overall competitive potential. The country's public institutions continue to be assessed as highly inefficient (100th), plagued by undue influence (111th) and high levels of corruption (101st). The security situation in Kenya is also extremely worrisome, particularly in crime and violence (126th), the potential of terrorism (129th), and the prevalence of organized crime (118th). Health is another area of serious concern (ranked 117th), with a high prevalence of diseases—particularly tuberculosis and HIV, which are among the highest of all countries covered (124th and 125th, respectively), contributing to the low life expectancy of 53 years.

Nigeria is ranked 94th this year. The country's greatest area of strength remains its macroeconomic environment (ranked 26th), with windfall oil revenues contributing to large (although declining) government budget surpluses and a high national savings rate. In addition, inflation, although still very high by international standards, has been coming down over recent years. Nigeria also benefits from a relatively large market, allowing for economies of scale. Furthermore, its financial markets are quite sophisticated by regional standards (ranked 54th).

On the other hand, the GCI shows that Nigeria's economy is characterized by weak and deteriorating institutions (ranked 106th, down from 87th in 2006)—including a serious security problem (125th)—and poor assessments for its infrastructure (120th) as well as basic health and education (126th). In addition, the country is not harnessing the latest technologies for productivity enhancements, as demonstrated by its low levels of ICT penetration. The rankings show that Nigeria has not taken the opportunity presented by recent windfall oil revenues to upgrade the population's access to basic health care and education, or to make improvements in other areas such as infrastructure. Movements in this

direction would be critical to set the basis for sustainable growth going forward.

Algeria has dropped 18 positions to 99th rank, and is now the weakest performer in North Africa. Despite robust growth reaching on average 4.8 percent a year over 2003–07,[13] and relative macroeconomic stability, the business sector assesses the operating environment in the country as more difficult than in previous years, particularly with respect to public and private institutions as well as innovative capacity. Trust in politicians is eroding as business leaders see the institutional framework deteriorate and the already precarious security situation worsen.[14] In addition to upgrading the institutional environment, improving the country's competitive position will require reforms in what is one of the most rigid labor markets in the world (132nd) and a restructuring of the very inefficient and unstable financial system (132nd). Labor market reforms could also contribute to improving the security situation by creating more jobs for the rising numbers of fairly well educated yet unemployed young people.

Tanzania has not managed to improve its competitiveness in recent years. In fact, it has been on a downward trend for the past three years; it was ranked 97th (out of 122) in 2006, 104th (out of 131) in 2007, and this year it ranked 113th out of 134 countries. Tanzania has some relative strengths in specific areas. The country benefits from a market that is large by regional standards, allowing companies to benefit from some economies of scale. And within the area of public institutions, there is a reasonable public trust of politicians (ranked 60th); somewhat satisfactory levels of judicial independence (ranked 66th); and government spending is seen as somewhat efficient, particularly by regional standards (ranked 56th). In addition, some aspects of the labor markets lend themselves to efficiency, such as the high female participation in the labor force (ranked 4th) and reasonable non-wage labor costs.

But Tanzania demonstrates weaknesses throughout most of the other areas measured by our Index. Infrastructure in the country is underdeveloped (ranked 118th), with poor-quality roads, ports, and electricity supply, and few telephone lines. Only railroad infrastructure gets a slightly better assessment (ranked 79th). And although primary education enrollment is commendably high and improving, enrollment rates at the secondary and university levels are among the lowest in the world (ranked 134th and 130th, respectively). In addition, the quality of the educational system receives a poor assessment. And the basic health of the workforce is also a serious concern, ranked 125th in this area, with poor health indicators and high levels of diseases such as malaria, tuberculosis, and HIV. So generally there should be a significant focus on upgrading the quality of the human resources base in the country.

Efforts should also be made to improve the efficiency of markets, particularly goods markets (ranked 111th), which are characterized by very low levels of domestic competition and in which a large number of procedures are required to start a business in the country. Related to the education level of the workforce, the adoption of new technologies is low in Tanzania (ranked 117th), with very low uptake of ICTs such as the Internet and mobile phones, and with Tanzanian firms not assessed as particularly aggressive in adopting the latest technologies in their business activities for productivity enhancements. Improvements in these areas would place Tanzania on a more solid footing for raising productivity in the country and growing sustainably going into the future.

Zimbabwe continues to be among the least competitive economies included in the GCI, ranked second to last at 133rd overall. This compares with last year's rank of 129, and represents a decline of one place even in a constant sample. The institutional environment is ranked among the worst of all countries, with a complete absence of property rights (ranked last out of all countries at 134th), high levels of corruption (130th), and a lack of even-handedness of the government in its dealings with the public (129th) as well as basic government inefficiency (130th). The extreme mismanagement of the public finances and monetary policy has placed Zimbabwe once again at the bottom of all countries covered with regard to macroeconomic stability (ranked 134th), with enormous—and growing—deficit spending, negligible national savings, and raging hyperinflation that is unparalleled. The economy is characterized by mismanagement and weaknesses across all areas, including health (ranked 128th in the health subpillar), low educational enrollment rates, and official markets that have ceased to function for all intents and purposes (particularly with regard to goods and labor markets, ranked 133rd and 127th, respectively).

Conclusions

This chapter has presented and analyzed the results for 31 African countries of the World Economic Forum's Global Competitiveness Index. The analysis provides an overview of the numerous factors, institutions, and policies that determine the productivity and prosperity of countries in the region. The clear and intuitive structure of the GCI framework is useful for identifying priorities for policy reforms because it allows countries to determine the strengths and weaknesses of the national competitive environment and to recognize those factors most constraining economic development.

The results show, of course, that there is a significant variety of performances across the continent. Some countries such as Botswana, Mauritius, South Africa, and Tunisia have been quite successful in putting into place many of the factors for economic development. Yet many obstacles to competitiveness remain across the majority of African countries, such as underdeveloped infrastructure, deficiencies in education and health-care

provision, and market inefficiencies. Particularly important, given the present economic crisis, are issues related to finance and trade. These themes are explored more in detail in Chapters 1.2, 1.3, and 1.5. Chapter 1.4 takes the analysis to the source of wealth creation, looking at competitiveness from the point of view of the individual firm. It explores in detail how production costs affect the productivity of individual firms, thus making the issues discussed in the previous chapters very concrete. And Chapters 1.3 and 1.6 present a number of case studies that highlight the main lessons learned by some of the more competitive African countries, as these could serve as examples of successful reforms on the African continent.

As the world weathers the most significant global financial crisis since the Great Depression, it is understandable—indeed, it is essential—that efforts to restore confidence in the market have monopolized the attention of the world's policymakers. Yet, in these trying times, it would be dangerous for Africa's leaders to lose sight of the large variety of factors beyond financial markets that, over the longer term, matter greatly for a country's economic success. Indeed, the countries with a winning combination of strengths will be best prepared to ride out the present economic storm and emerge as stronger, more productive and competitive economies.

While better regulation and oversight of the financial sector are certainly necessary in many countries, it would be disastrous if a general backlash to the extraordinary ability of markets to generate wealth and prosperity led African policymakers to forget about other important issues and to back-peddle on structural reforms aimed at injecting greater flexibility and competition into labor, goods, and services markets. After many years of negative growth, most sub-Saharan African economies started growing in the mid 1990s. The timid introduction of freer markets in post-socialist and post-war African economies has been associated with positive growth rates over the past 12 years. This encouraging performance has reduced poverty rates at unprecedented rates. A worldwide backlash against free markets could put a sudden end to this process. And that would have catastrophic consequences for the region.

The goal of the World Economic Forum's competitiveness work is to provide a platform for dialogue among government, business, and civil society that can serve as a catalyst for productivity-raising reforms, with the aim of boosting living standards. It is our hope that this joint *Report* will provide a useful tool in Africa to this end, and that such discussions will boost the reform process so crucial for African competitiveness.

Notes

1 According to UNCTAD's *FDIStat* database, between 2003 and 2007, the stock of FDI increased from US$202 billion to US$393 billion. Data available at http://www.unctad.org/Templates/Page.asp?intItemID=3199&lang=1.

2 IMF 2009.

3 As aptly noted by one reviewer, competitiveness and sustainable development will also depend on countries' abilities to withstand demand (and price) shocks, such as the one Africa is presently experiencing. This calls for diversification away from a narrow range of products and a narrow range of markets.

4 The Global Competitiveness Index was developed for the World Economic Forum by Xavier Sala-i-Martin and Elsa V. Artadi, in collaboration with the Global Competitiveness Network team, and was first introduced in *The Global Competitiveness Report 2004–2005.*

5 The data are chosen using a random stratification procedure, based on company size and economic sector. The collected respondent-level data are subjected to a careful editing process. The first editing rule consists of excluding those surveys with a completion rate inferior to 50 percent. This is because partially completed surveys likely demonstrate a lack of sufficient focus on the part of the respondent. In a second step, a multivariate outlier analysis is applied to the data using the Mahalanobis distance technique. This test assesses whether each individual survey is representative, given the overall sample of survey responses in the specific country, and allows for the deletion of clear outliers. Further information on the Executive Opinion Survey can be found in Chapter 2.1 of *The Global Competitiveness Report 2008–2009,* which is available online at http://www.weforum.org.

6 Some restrictions were imposed on the coefficients estimated. For example, the three coefficients for each stage had to add up to one, and all the weights had to be non-negative.

7 In order to capture the resource intensity of the economy, we use as a proxy the exports of mineral products as a share of overall exports according to the sector classification developed by the International Trade Centre in their Trade Performance Index. In addition to crude oil and gas, this category also contains all metal ores and other minerals as well as petroleum products, liquefied gas, coal, and precious stones. Further information on these data can be found at the following site: http://www.intracen.org/menus/countries.htm.

All countries that export more than 70 percent of mineral products are considered to be to some extent factor driven. The stage of development for these countries is adjusted downward smoothly depending on the exact primary export share. The higher the minerals export share, the stronger the adjustment and the closer the country will move to stage 1. For example, a country that exports 95 percent of mineral exports and that, based on the income criteria, would be in stage 3, will be in transition between stage 1 and 2. The income and primary exports criteria are weighted identically. Stages of development are dictated uniquely by income for countries that export less than 70 percent minerals. Countries that export only primary products would automatically fall into the factor-driven stage (stage 1).

8 The ASEAN average includes data for all member countries for which data are available, namely Brunei Darussalam, Cambodia, Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam.

9 The Latin America and Caribbean average includes data for the following countries: Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Suriname, Trinidad and Tobago, Uruguay, and Venezuela.

10 Note that in this chapter we use as a comparison the results from last year's GCI results, as published in *The Global Competitiveness Report 2007–2008.*

11 OECD Development Centre, AEO 2008 – Morocco, available at http://www.oecd.org/dataoecd/13/8/40578273.pdf.

12 IMF 2007.

13 IMF 2009.

14 *The Economist* 2008.

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Appendix A: Structure of the Global Competitiveness Index 2008–2009

This appendix presents the structure of the Global Competitiveness Index 2008–2009 (GCI).

The numbering of the variables matches the numbering of the Data Tables in the *The Global Comptetiveness Report 2008–2009*. The number preceding the period indicates to which pillar the variable belongs (e.g., variable **1.**01 belongs to the 1st pillar, variable **12.**04 belongs to the 12th pillar).

The hard data indicators used in the GCI are normalized on a 1-to-7 scale in order to align them with the Executive Opinion Survey's results.[a] The Competitiveness Profiles section of this *Report* provides detailed technical information and sources on all the Survey and hard data indicators.

Those variables that are followed by the symbol 1/2 enter the GCI in two different places. In order to avoid double counting, we give them a half-weight in each place by dividing their value by 2 when computing the aggregate score for the two categories in which they appear.[b]

The percentage next to each category represents this category's weight within its immediate parent category. The computation of the GCI is based on successive aggregations of scores, from the variable level (i.e., the lowest level) all the way up to the overall GCI score (i.e., the highest level), using the weights reported below. For example, the score a country achieves in the 9th pillar accounts for 17 percent of this country's score in the *Efficiency enhancers* subindex. Similarly, the score achieved on the subpillar *Networks and supporting industries* accounts for 50 percent of the score of the 11th pillar. Reported percentages are rounded to the nearest integer, but exact figures are used in the calculation of the GCI.

Unlike for the lower levels of aggregation, the weight put on each of the three subindexes (Basic requirements, Efficiency enhancers, and Innovation factors) is not fixed. It depends on each country's stage of development, as discussed in the text.[c] For instance, in the case of Benin—a country in the factor-driven stage of development—the score in the *Basic requirements* subindex accounts for 60 percent of its overall GCI score, while it represents just 40 percent of the overall GCI score of South Africa, a country in the efficiency-driven stage of development.

Weight (%) within immediate parent category

BASIC REQUIREMENTS

1st pillar: Institutions 25%

A. Public institutions 75%

1. Property rights 20%
   - 1.01 Property rights
   - 1.02 Intellectual property protection 1/2
2. Ethics and corruption 20%
   - 1.03 Diversion of public funds
   - 1.04 Public trust of politicians
3. Undue influence 20%
   - 1.05 Judicial independence
   - 1.06 Favoritism in decisions of government officials
4. Government inefficiency 20%
   - 1.07 Wastefulness of government spending
   - 1.08 Burden of government regulation
   - 1.09 Efficiency of legal framework
   - 1.10 Transparency of government policymaking
5. Security 20%
   - 1.11 Business costs of terrorism
   - 1.12 Business costs of crime and violence
   - 1.13 Organized crime
   - 1.14 Reliability of police services

B. Private institutions 25%

1. Corporate ethics 50%
   - 1.15 Ethical behavior of firms
2. Accountability 50%
   - 1.16 Strength of auditing and reporting standards
   - 1.17 Efficacy of corporate boards
   - 1.18 Protection of minority shareholders' interests

2nd pillar: Infrastructure 25%

A. General infrastructure 50%

- 2.01 Quality of overall infrastructure

B. Specific infrastructure 50%

- 2.02 Quality of roads
- 2.03 Quality of railroad infrastructure
- 2.04 Quality of port infrastructure
- 2.05 Quality of air transport infrastructure
- 2.06 Available seat kilometers (hard data)
- 2.07 Quality of electricity supply
- 2.08 Telephone lines (hard data)

3rd pillar: Macroeconomic stability 25%

- 3.01 Government surplus/deficit (hard data)
- 3.02 National savings rate (hard data)
- 3.03 Inflation (hard data)[d]
- 3.04 Interest rate spread (hard data)
- 3.05 Government debt (hard data)

(Cont'd.)

Appendix A: Structure of the Global Competitiveness Index 2008–2009 *(cont'd.)*

4th pillar: Health and primary education 25%

A. Health.....50%
- 4.01 Business impact of malaria[e]
- 4.02 Malaria incidence (hard data)[e]
- 4.03 Business impact of tuberculosis[e]
- 4.04 Tuberculosis incidence (hard data)[e]
- 4.05 Business impact of HIV/AIDS[e]
- 4.06 HIV prevalence (hard data)
- 4.07 Infant mortality (hard data)
- 4.08 Life expectancy (hard data)

B. Primary education 50%
- 4.09 Quality of primary education
- 4.10 Primary enrollment (hard data)
- 4.11 Education expenditure (hard data)[1/2]

EFFICIENCY ENHANCERS

5th pillar: Higher education and training.....17%

A. Quantity of education 33%
- 5.01 Secondary enrollment (hard data)
- 5.02 Tertiary enrollment (hard data)
- 4.11 Education expenditure (hard data)[1/2]

B. Quality of education.....33%
- 5.03 Quality of the educational system
- 5.04 Quality of math and science education
- 5.05 Quality of management schools
- 5.06 Internet access in schools

C. On-the-job training 33%
- 5.07 Local availability of specialized research and training services
- 5.08 Extent of staff training

6th pillar: Goods market efficiency 17%

A. Competition 67%

1. Domestic competition.....variable[f]
   - 6.01 Intensity of local competition
   - 6.02 Extent of market dominance
   - 6.03 Effectiveness of anti-monopoly policy
   - 6.04 Extent and effect of taxation[1/2]
   - 6.05 Total tax rate (hard data)[1/2]
   - 6.06 Number of procedures required to start a business (hard data)[g]
   - 6.07 Time required to start a business (hard data)[g]
   - 6.08 Agricultural policy costs
2. Foreign competition .....variable[f]
   - 6.09 Prevalence of trade barriers
   - 6.10 Trade-weighted tariff rate (hard data)
   - 6.11 Prevalence of foreign ownership
   - 6.12 Business impact of rules on FDI
   - 6.13 Burden of customs procedures
   - 10.04 Imports as a percentage of GDP (hard data)

B. Quality of demand conditions.....33%
- 6.14 Degree of customer orientation
- 6.15 Buyer sophistication

7th pillar: Labor market efficiency 17%

A. Flexibility 50%
- 7.01 Cooperation in labor-employer relations
- 7.02 Flexibility of wage determination
- 7.03 Non-wage labor costs (hard data)
- 7.04 Rigidity of employment (hard data)
- 7.05 Hiring and firing practices
- 6.04 Extent and effect of taxation[1/2]
- 6.05 Total tax rate (hard data)[1/2]
- 7.06 Firing costs (hard data)

B. Efficient use of talent 50%
- 7.07 Pay and productivity
- 7.08 Reliance on professional management[1/2]
- 7.09 Brain drain
- 7.10 Female participation in labor force (hard data)

8th pillar: Financial market sophistication.....17%

A. Efficiency 50%
- 8.01 Financial market sophistication
- 8.02 Financing through local equity market
- 8.03 Ease of access to loans
- 8.04 Venture capital availability
- 8.05 Restriction on capital flows
- 8.06 Strength of investor protection (hard data)

B. Trustworthiness and confidence.....50%
- 8.07 Soundness of banks
- 8.08 Regulation of securities exchanges
- 8.09 Legal rights index (hard data)

9th pillar: Technological readiness.....17%
- 9.01 Availability of latest technologies
- 9.02 Firm-level technology absorption
- 9.03 Laws relating to ICT
- 9.04 FDI and technology transfer
- 9.05 Mobile telephone subscribers (hard data)
- 9.06 Internet users (hard data)
- 9.07 Personal computers (hard data)
- 9.08 Broadband Internet subscribers (hard data)

10th pillar: Market size 17%

A. Domestic market size.....75%
- 10.01 Domestic market size index (hard data)[h]

B. Foreign market size 25%
- 10.02 Foreign market size index (hard data)[i]

INNOVATION AND SOPHISTICATION FACTORS

11th pillar: Business sophistication 50%

A. Networks and supporting industries 50%
- 11.01 Local supplier quantity
- 11.02 Local supplier quality
- 11.03 State of cluster development

Appendix A: Structure of the Global Competitiveness Index 2008–2009 *(cont'd.)*

B. Sophistication of firms' operations and strategy 50%

11.04 Nature of competitive advantage
11.05 Value chain breadth
11.06 Control of international distribution
11.07 Production process sophistication
11.08 Extent of marketing
11.09 Willingness to delegate authority
7.08 Reliance on professional management[1/2]

12th pillar: Innovation.....50%

12.01 Capacity for innovation
12.02 Quality of scientific research institutions
12.03 Company spending on R&D
12.04 University-industry research collaboration
12.05 Government procurement of advanced technology products
12.06 Availability of scientists and engineers
12.07 Utility patents (hard data)
1.02 Intellectual property protection[1/2]

Notes

a The standard formula for converting hard data is the following:

$$6 \times \frac{(\text{country score} - \text{sample minimum})}{(\text{sample maximum} - \text{sample minimum})} + 1$$

The *sample minimum* and *sample maximum* are, respectively, the lowest and highest country scores in the sample of countries covered by the GCI. In some instances, adjustments were made to account for extreme outliers. For those hard data variables for which a higher value indicates a worse outcome (e.g., disease incidence, government debt), we rely on a normalization formula that, in addition to converting the series to a 1-to-7 scale, reverses it, so that 1 and 7 still corresponds to the worst and best possible outcomes, respectively:

$$-6 \times \frac{(\text{country score} - \text{sample minimum})}{(\text{sample maximum} - \text{sample minimum})} + 7$$

b For those groups of variables that contain one or several half-weight variables, country scores for those groups are computed as follows:

$$\frac{(\text{sum of scores on full-weight variables}) + \frac{1}{2} \times (\text{sum of scores on half-weight variables})}{(\text{count of full-weight variables}) + \frac{1}{2} \times (\text{count of half-weight variables})}$$

c As described in the chapter, the weights are the following:

Weights	Factor-driven stage (%)	Efficiency-driven stage (%)	Innovation-driven stage (%)
Basic requirements	60	40	20
Efficiency enhancers	35	50	50
Innovation and sophistication factors	5	10	30

d In order to capture the idea that both high inflation and deflation are detrimental, inflation enters the model in a U-shaped manner as follows: for values of inflation between 0.5 and 2.9 percent, a country receives the highest possible score of 7. Outside this range, scores decrease linearly as they move away from these values.

e The impact of malaria, tuberculosis, and HIV/AIDS on competitiveness depends not only on their respective incidence rates, but also on how costly they are for business. Therefore, in order to estimate the impact of each of the three diseases, we combine its incidence rate with the Survey question on its perceived cost to businesses. To combine these data we first take the ratio of each country's disease incidence rate relative to the highest incidence rate in the whole sample. The inverse of this ratio is then multiplied by each country's score on the related Survey question. This product is then normalized to a 1-to-7 scale. Note that countries with zero reported incidence receive a 7, regardless of their scores on the related Survey question.

f The *Competition* subpillar is the weighted average of two components: *Domestic competition* and *Foreign competition*. In both components, the included variables provide an indication of the extent to which competition is distorted. The relative importance of these distortions depends on the relative size of domestic versus foreign competition. This interaction between the domestic market and the foreign market is captured by the way we determine the weights of the two components. Domestic competition is the sum of consumption (C), investment (I), government spending (G), and exports (X), while foreign competition is equal to imports (M). Thus we assign a weight of (C+I+G+X)/(C+I+G+X+M) to *Domestic competition*, and a weight of M/(C+I+G+X+M) to *Foreign competition*.

g Variables 6.06 and 6.07 combine to form one single variable.

h The size of the domestic market is constructed by taking the natural log of the sum of the gross domestic product valued at PPP plus the total value (PPP estimates) of imports of goods and services, minus the total value (PPP estimates) of exports of goods and services. Data are then normalized on a 1-to-7 scale. PPP estimates of imports and exports are obtained by taking the product of exports as a percentage of GDP and GDP valued at PPP. The underlying data are reported in the Data Tables section.

i The size of the foreign market is estimated as the natural log of the total value (PPP estimates) of exports of goods and services, normalized on a 1-to-7 scale. PPP estimates of exports are obtained by taking the product of exports as a percentage of GDP and GDP valued at PPP. The underlying data are reported in the Data Tables section.

CHAPTER 1.2

Finance in Africa: Achievements and Challenges

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MICHAEL FUCHS, The World Bank
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Hope has been in the air for finance in Africa. Financial systems across the continent have become deeper, more efficient, and more stable over the past several years. While the global crisis will affect sub-Saharan Africa as much as other developing countries in the world—though mostly through real rather than financial channels—today its financial sectors are in a better position to weather the global turmoil than they have been in the past and can help their host economies smooth the impact of the crisis. Nevertheless, the increasing integration of Africa into the global economy through capital flows and foreign direct investment in the financial sector poses new challenges for policymakers and underlines the importance of well-informed financial-sector policy.

This chapter will discuss recent trends in African financial systems and focus on two major but controversial policy issues: the role of government and the role of foreign banks. Debates on both issues have changed dramatically over the past decades. The approach of governments replacing markets was seen as necessary in the 1960s and 1970s; this changed into an almost laissez-faire approach focusing on liberalization and privatization in the 1980s and 1990s, before the pendulum swung back somewhat toward a more active, albeit different, role for government during the past 10 years. Similarly, the attitude toward integration into global financial markets has changed dramatically over the past decades and will surely be further influenced by the ongoing financial crisis. Some countries went full circle, from nationalizing foreign banks in the 1960s and 1970s to privatizing failed government-owned banks to international banks in the 1990s. The profile of foreign banks in Africa, however, has changed, as we will discuss below.

Financial-sector policies have become a centerpiece in the debate on how to foster growth in low-income countries and reduce stark poverty levels. Over the past 15 years, ample evidence using different aggregation levels and methodologies has been accumulated on the growth-enhancing effect of financial-sector development.[1] It is primarily through improvements in resource allocation and productivity growth that finance helps economies grow faster.[2] Financial deepening helps especially those industries more dependent on external finance,[3] and also helps to reduce financing constraints, particularly for smaller firms.[4] Financial deepening has thus a transformative effect on economies, shaping the

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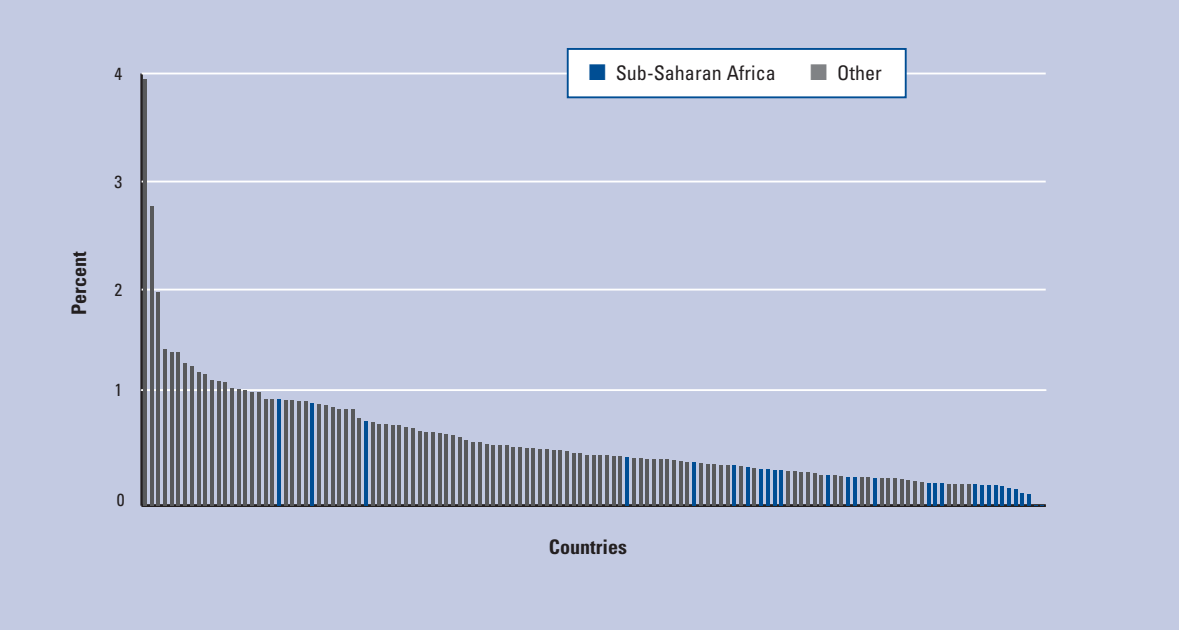
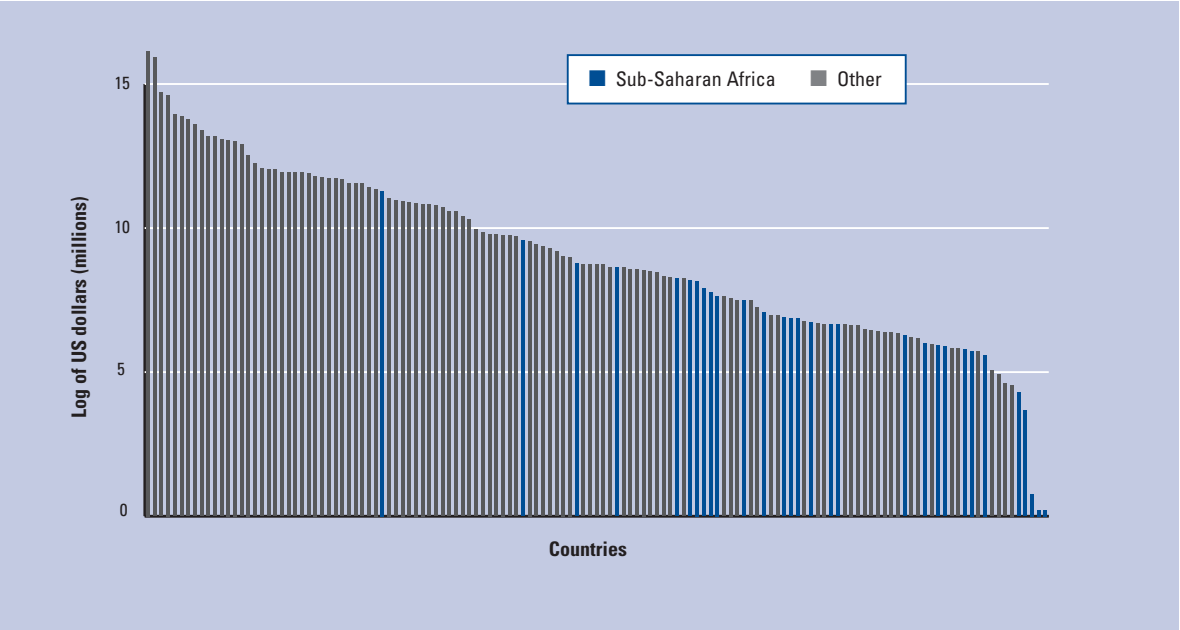
Figure 1: Liquid liabilities to GDP across countries



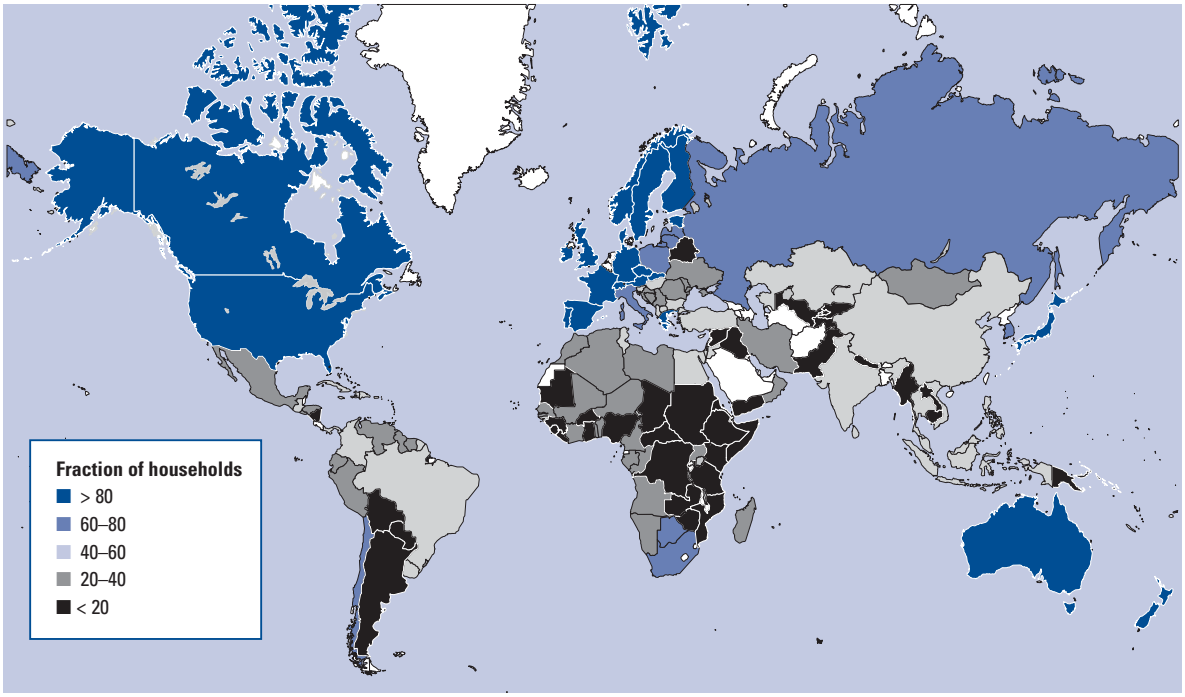
Source: Beck and Demirgüç-Kunt, 2009.
Note: Sample size is 161 countries; data are for 2007. One bar denotes one country; countries in sub-Saharan Africa are marked with blue.

Figure 2: The absolute size of financial systems across countries



Source: Beck and Demirgüç-Kunt, 2009.
Note: Sample size is 133 countries; data are for 2007. Liquid liabilities are computed in log of US$ millions. One bar denotes one country; countries in sub-Saharan Africa are marked with blue.

Figure 3: Access to financial services by households across the globe



Source: World Bank, 2007a.
Note: Data are for 2003–04 and indicate the share of households with access to a financial account.

industrial structure, the firm size distribution, and even organizational structures.[5] Cross-country comparisons also show a pro-poor effect of financial deepening:[6] it is the poorest quintile that sees their income share grow fastest with financial deepening, and countries with deeper financial systems experience faster reductions in poverty levels.

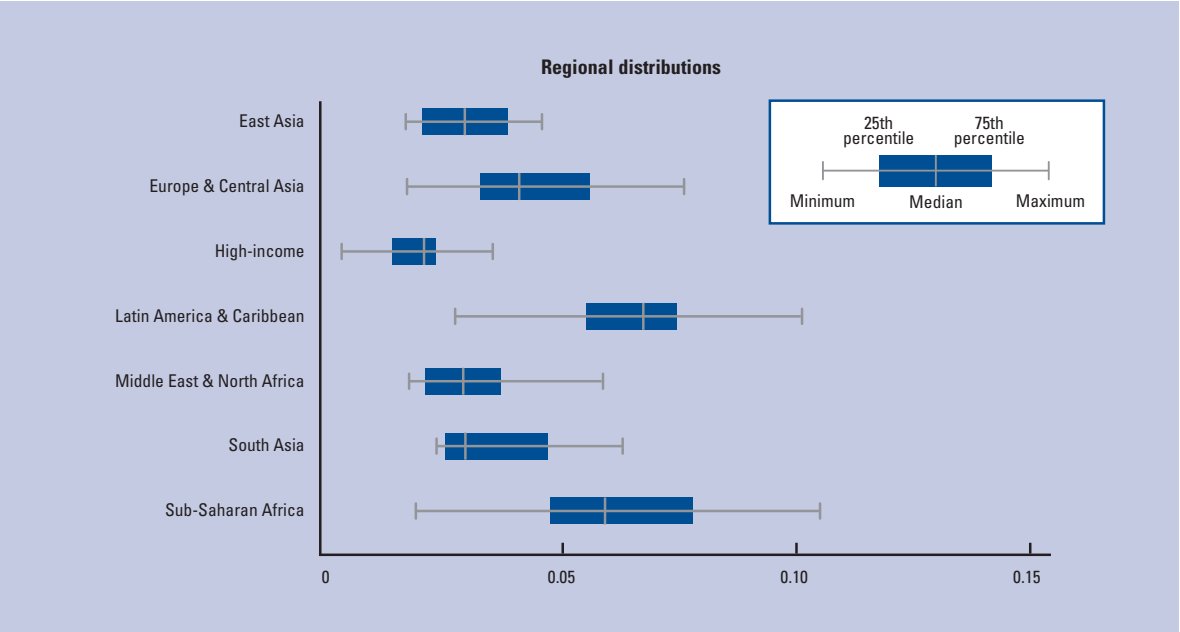
After a decade of macroeconomic and financial reforms, the shallowness of finance in Africa is worrying, especially given the potential that finance has to foster economic growth and meet the Millennium Development Goal of halving poverty levels by 2015. However, there have been promising trends and developments. The next section of this chapter presents the current status of finance in Africa and some promising trends. The third and fourth sections focus on two critical areas: the role of governments in deepening and broadening financial systems in Africa and the role of foreign banks. The final section concludes and looks forward.

Finance in Africa: Growing from a low level

Given the central importance of finance for economic development and poverty alleviation, the superficiality of African finance is alarming. African financial systems are small, both in absolute terms as in relative terms. Figures 1 and 2 show the ratio of liquid liabilities to GDP and the log of liquid liabilities in US dollars, respectively, with data for 2007. With a few exceptions—such as Mauritius, South Africa, and a handful of offshore financial centers—African financial systems are among the smallest across the globe, both in absolute terms and relative to economic activity. Many African financial systems are smaller than a mid-sized bank in continental Europe, with total assets often less than US$1 billion. Small size is connected to low productivity and skill shortages, and prevents banks from exploiting scale economies; in addition, it might deter them from undertaking large investments in technology. In addition, Africa's financial systems are characterized by very limited outreach, with less than one in five households having access to any formal banking service—savings, payments, or credit (Figure 3). Again, this in stark contrast not only to continental Europe, where access to a checking account is taken for granted, but also to other regions of the developing world, where penetration rates are typically between 30 and 50 percent. Behind these low numbers, however, is some intra-regional variation, with banking penetration surpassing 40 percent in South Africa but remaining below 20 percent in most of East Africa.

Banking is also very expensive in Africa, as reflected by high interest spreads and margins (Figure 4).[7] This spread between deposit and lending interest rates provides disincentives for both savings and lending, as it depresses the returns for savers and pushes lending interest rates up. Compared to other regions of the

Figure 4: Net interest margins across regions



Source: Beck and Demirgüç-Kunt, 2009.
Note: Sample size is 133 countries; data are for 2007. Net interest margins are calculated as net interest revenue divided by total earning assets.

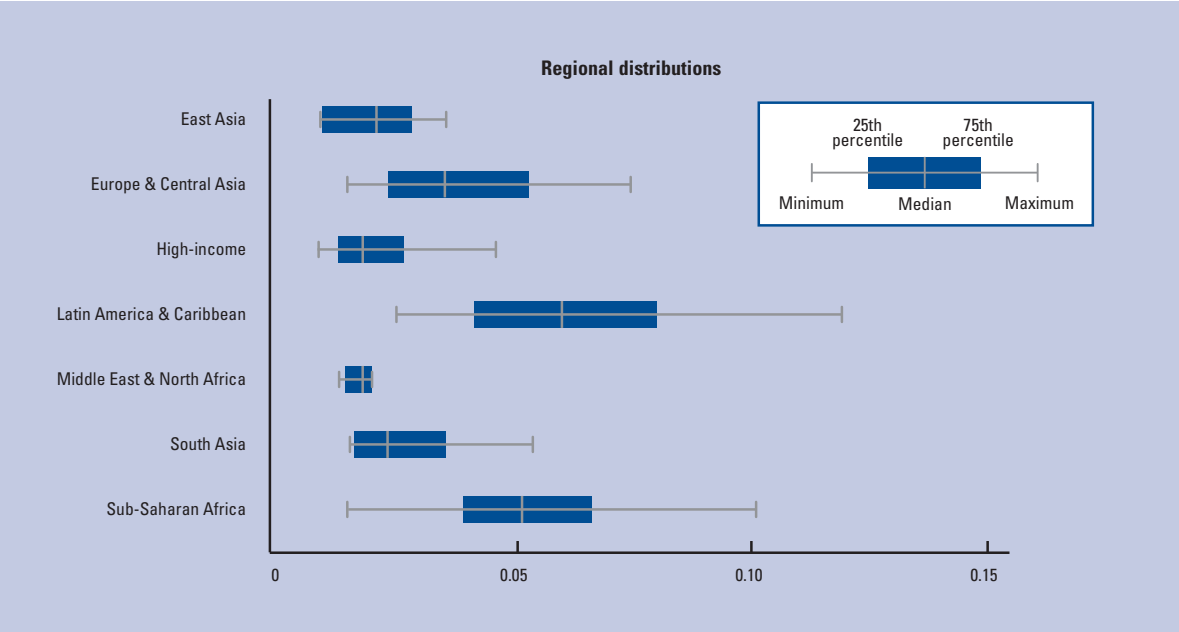
world, financial systems in Africa also have higher levels of overhead costs (Figure 5). High spreads, margins, and overhead costs can be explained by the same factors as the low levels of financial depth, shown above in Figures 1 and 2. The absence of scale economies and the very high risks due to weak and underdeveloped contractual frameworks and economic and political volatility drive up banking costs and reduce time horizons for both investors and borrowers. These costs make outreach to savers and borrowers who need small transactions commercially unviable. Decomposition of interest spreads and cross-country comparisons of interest margins typically point to the small size of African banking systems, deficient contractual frameworks, and limited protection of property rights as an explanation of the excess spreads and margins in Africa compared to other regions.[8] Most striking is the difference from South Asian countries, such as Bangladesh, India, or Pakistan, which—in spite of similar challenges in governance and volatility—are all in better positions to exploit scale economies.

In spite of high costs and high risks, banks are, however, very profitable (Figure 6). Indeed, subsidiaries of foreign banks in sub-Saharan Africa have higher returns on assets and equity than subsidiaries of the same banks in other regions of the world.[9] This trend will most likely be even stronger in the months and years to come, as global investors' risk appetite is fading. This might reflect partly the very high risks of banking in Africa and partly the lack of competition. This lack of competition in turn, is again related to the lack of scale in most African financial systems, which limits the number of financial institutions that an economy can sustain. However, it is also related to the widespread incidence of informality, which reduces the base of potential clients of the formal financial system.

Banking is also very expensive for deposit customers, as reflected by very high minimum balance requirements and annual fees not only for checking customers but even for savings account holders in many African countries (see Figure 7).[10] Moreover, these high costs alone can explain why less than 20 percent of the population in many African countries has a bank account. Using simple back-of-the-envelope calculations, Beck et al. show that 54 percent of the population in Cameroon, 81 percent in Kenya, 40 percent in Madagascar, 94 percent in Malawi, 89 percent in Sierra Leone, and 93 percent in Uganda cannot afford the fees for checking accounts, given their annual income and the assumption that they cannot spend more than 2 percent of household income on financial transaction account charges.[11]

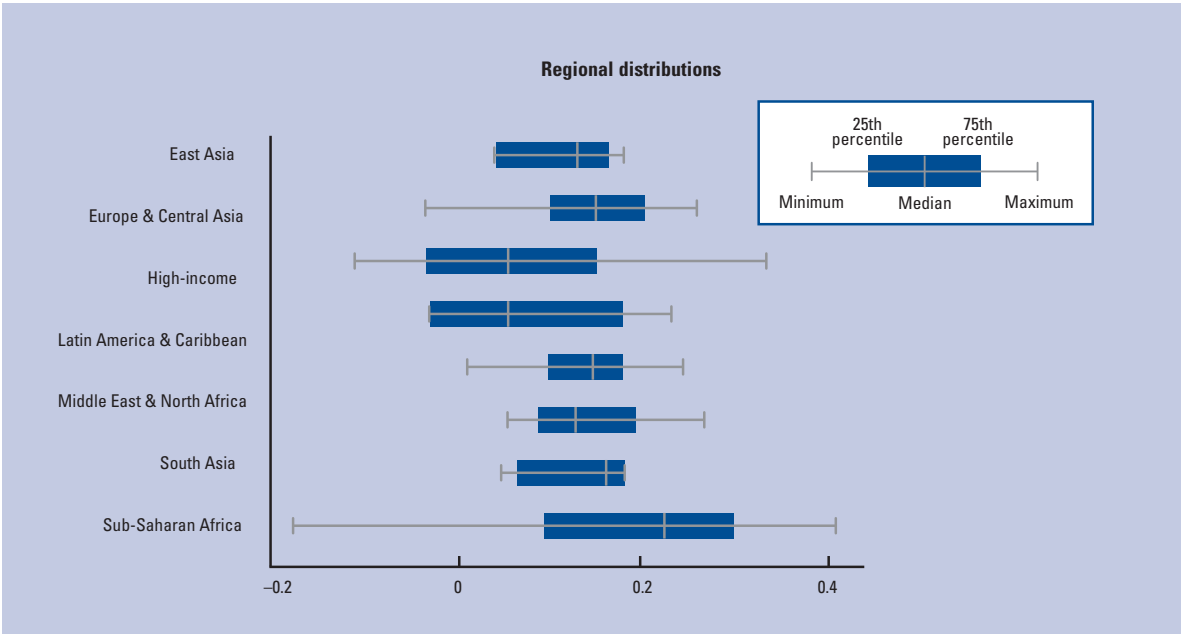
High fees, however, are only one factor behind limited outreach of Africa's financial systems. High documentation requirements to open an account—that is, the need to present several documents of identification, such as passport, pay slip, utility bill, and so on, also represent significant barriers given that large parts of the population live and work in the informal sector. Africa again stands out along this dimension, as becomes obvious from Figure 8. Similarly, physical access is limited, as

Figure 5: Overhead costs across regions



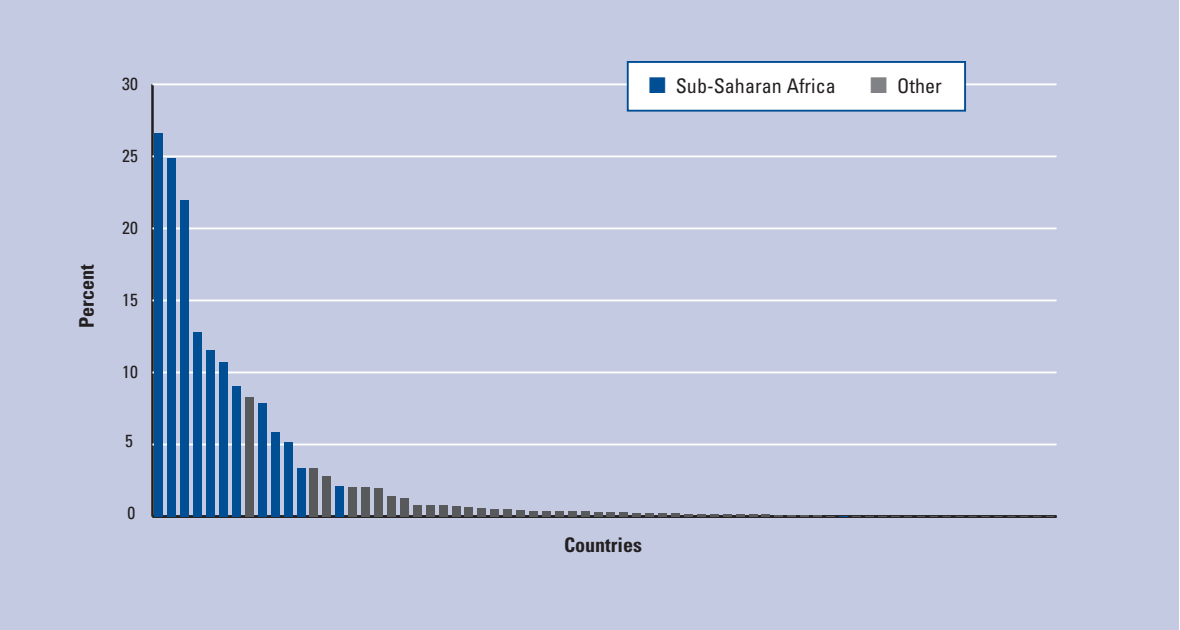
Source: Beck and Demirgüç-Kunt, 2009.
Note: Sample size is 135 countries; data are for 2007. Overhead costs are relative to total assets.

Figure 6: Banks' returns on equity across regions



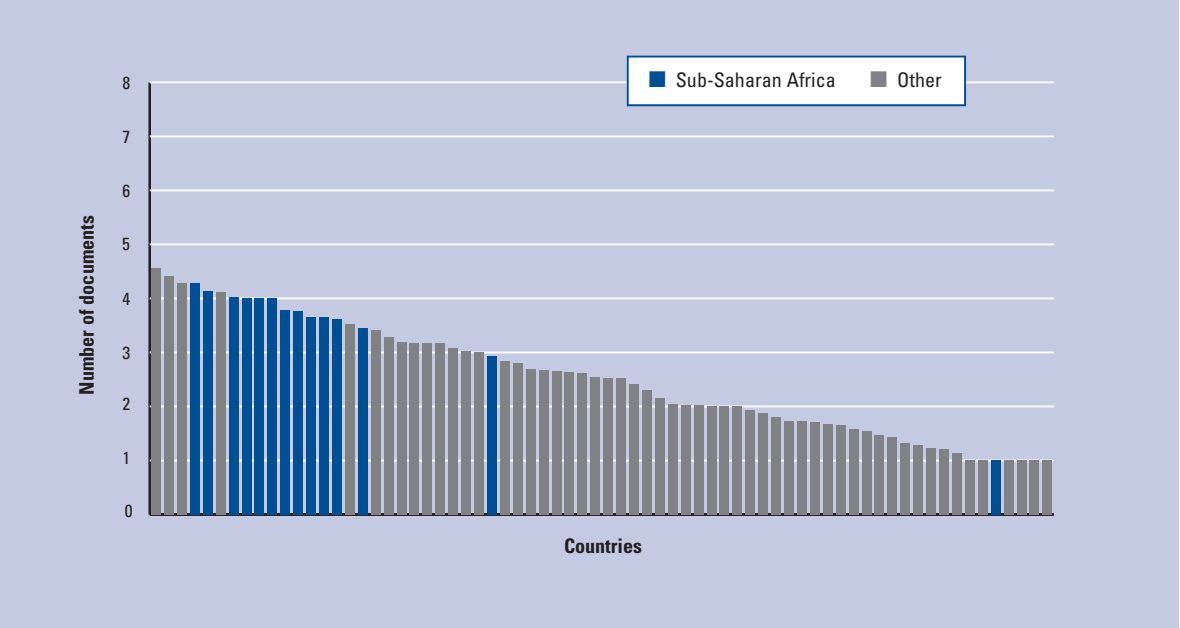
Source: Beck and Demirgüç-Kunt, 2009.
Note: Sample size is 136 countries; data are for 2007.

Figure 7: Checking account fees relative to GDP per capita



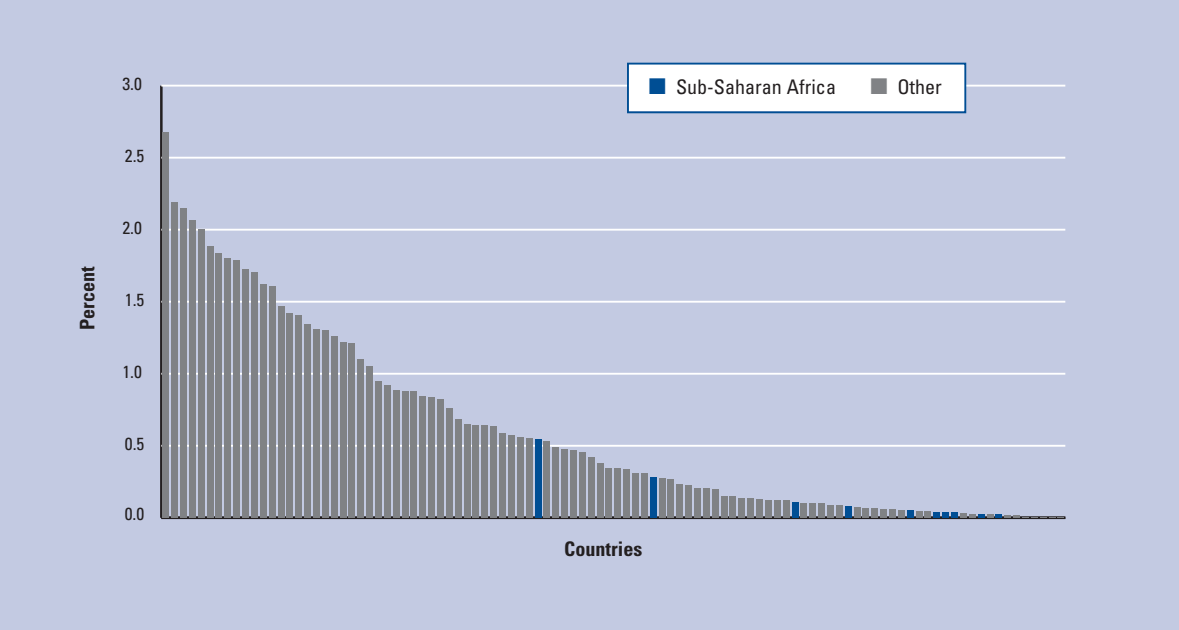
Source: Beck et al., 2008.
Note: Sample size is 88 countries; data are for 2004 and indicate the fees to maintain a checking account relative to GDP per capita. Countries in sub-Saharan Africa are marked with blue.

Figure 8: Documentation requirements across countries



Source: Beck et al., 2008.
Note: Sample size is 88 countries; data are for 2004 and indicate the number of documents needed to open an account. Countries in sub-Saharan Africa are marked with blue.

Figure 9: Stock market turnover across countries



Source: Beck and Demirgüç-Kunt, 2009.
Note: Sample size is 101 countries; data are for 2007 and indicate value traded relative to market capitalization. Countries in sub-Saharan Africa are marked with blue.

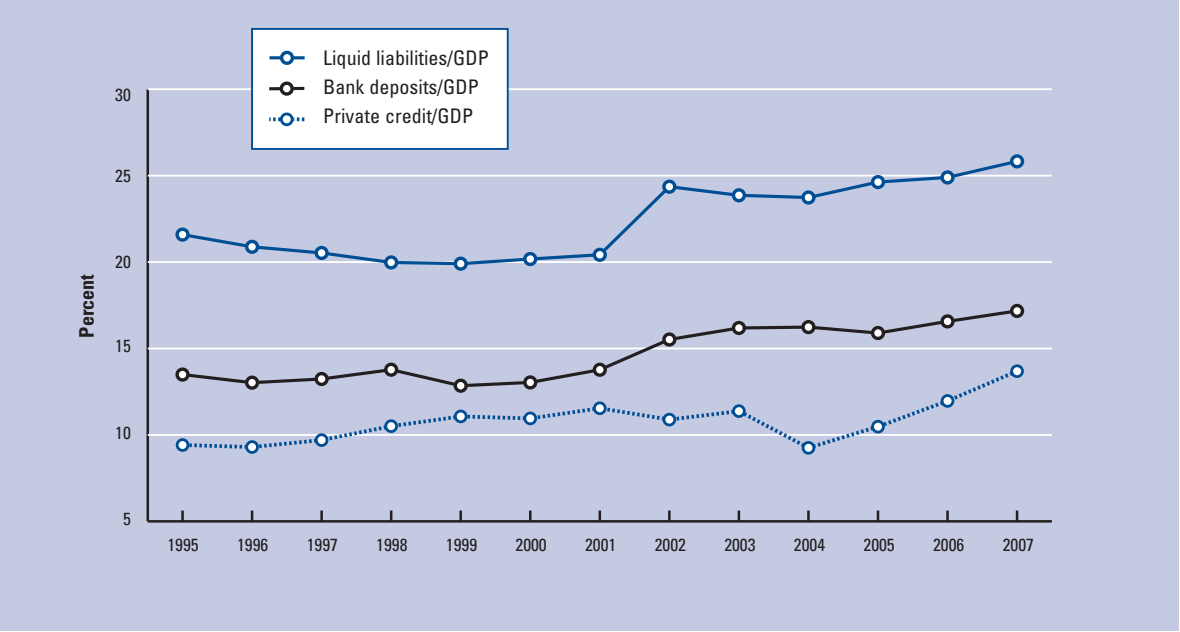
the low bank branch and ATM penetration numbers for Africa illustrate.

The gap between Africa and other regions of the world is even starker in other parts of the financial systems. Only a third of countries in the region have stock markets, which are mostly small and illiquid (Figure 9). The actual float of the listed companies is low. The low transaction volume in both primary and secondary markets is self-enforcing, as it deters new issuers. Only 13 African countries have seen corporate bond issues; in all these cases, the issues have been highly concentrated in the telecommunications and banking sectors.[12] While there have been some signs of improvement, such as large initial public offerings (IPOs) on the Ghanaian, Kenyan, and Nigerian stock exchanges, it is unlikely that these advances will make capital markets sustainable. Attempts at establishing regional markets have been less successful than expected, as the example of the regional exchange in Abidjan shows, as do the continuous political struggles related to creating a similar regional exchange for the Central African Monetary Union.

However, many countries in sub-Saharan Africa have not only seen economic growth pick up in recent years, but financial deepening and broadening have occurred in them as well. While this might be partly driven by demand and partly by international capital inflows, improvements in the institutional framework of finance—such as the establishment of commercial courts and alternative dispute resolution systems, the establishment or improvement of collateral registries and credit reference bureaus, and macroeconomic stability—have certainly contributed to this improvement. Stronger confidence in Africa's financial systems is also reflected in the quintupling of private capital inflows over the period 2000 to 2007;[13] these surpassed donor inflows for the first time in 2006, thus reversing a long-term trend. This surge of private capital into Africa was part of increased capital flows to emerging markets resulting from the worldwide liquidity glut. However, as cross-country comparisons show,[14] these flows partly also reflect improved macroeconomic fundamentals in many African countries, such as macroeconomic stability and fiscal discipline. When looking behind this aggregate, however, one notes that capital flows are concentrated in specific countries and sectors, such as natural resource extraction, thus benefiting only narrow parts of the economy and society.

Standard indicators of financial intermediary development, such as liquid liabilities to GDP, bank deposits to GDP, and private credit to GDP have demonstrated financial deepening in most African countries over the past years (Figure 10). As credit has been growing faster than deposits in most countries, financial intermediation —that is, the extent to which banks intermediate society's savings into private credit—has also increased, although from very low levels. Efficiency and profitability indicators, on the other hand, have shown no clear trend over the past years, with the median fluctuating, pointing to continuous problems of scale and competitiveness.

Figure 10: Financial deepening in sub-Saharan Africa, 1995 to 2007



Source: Beck and Demirgüç-Kunt, 2009.
Note: This graph shows the median of liquid liabilities to GDP, bank deposits to GDP, and private credit to GDP across sub-Saharan Africa for each year.

The improvement in banking system indicators and continued weakness in financial markets is consistent with the status of African financial sectors as bank- rather than market-based systems. The focus of financial policymakers on improving the infrastructure necessary for sound and efficient banking—such as establishing credit registries, upgrading collateral registries, and improving creditor rights—is thus consistent with level of economic and financial-sector development in Africa. An overemphasis on capital market development, on the other hand, would be premature, given that the necessary legal and regulatory conditions are not in place and—most importantly—the necessary demand from corporations is lacking. Furthermore, international experience suggests that small economies have an increasingly difficult time supporting liquid stock exchanges in a global economy, independent of their income level, as stock exchanges are subject to scale and network economies.[15] The more successful large enterprises across the developing world increasingly list abroad at a few exchanges, be it through cross-listing or through issue of American Depository Receipts and General Depository Receipts. Within Africa, the Johannesburg Stock Exchange will most likely be the only stock market able to sustain sufficient scale in the years to come, and even that only in cooperation with stock exchanges in Europe and North America. On the other hand, there is a need to mobilize long-term resources locally—for example, for infrastructure projects—which will require a comprehensive policy package, including pension reform.

Although not documented in a statistical sense, there seems to have been progress in expanding outreach as well. Technological advances have allowed sub-Saharan Africa to leapfrog, as, for instance, in utilizing mobile telephone technology for expanding the share of population having access to payment services, as the example of M-Pesa in Kenya has shown. Banks across the region are offering innovative financial and low-cost products and utilize new technologies to reach out to larger shares of the population (Box 1). As we will discuss below, changes in market structure seem to have resulted in more innovative marketplaces in several countries, with a number of banks attempting new ways and products to expand outreach.

The next two sections will discuss the role of government and the integration of financial systems into the international financial markets, respectively. We will draw on the existing literature, experiences across Africa, and experiences from other developing regions of the world to discuss the proper role of government and an adequate reaction to the trends toward globalization.

The role of government in the financial sector

One of the most controversial issues in financial-sector policies has been the proper role of government. This debate in Africa is largely parallel to discussions in other regions of the world. It started with a prominent role for governments after independence in the 1960s and 1970s, followed by a withdrawal of government in many

Box 1: The impact of the financial crisis on Africa

Although the direct impact of the current crisis in the United States and Europe on African financial systems is relatively contained—given that African banks are not as closely integrated into the global financial system as other regions of the developing world and hold most of their assets and commitments on rather than off the balance sheet—indirect effects through the real economy and through reduced private capital inflows caused by reduced risk appetite might very well have negative repercussions for real and financial sectors in Africa.

African banks are, on average, not exposed to risks arising from complex derivative instruments or products. They have typically low loan-deposit ratios and high liquidity reserves. Unlike in several European countries—and with the notable exception of South Africa—there is also very limited household lending, at the core of the financial crisis in the United States and other developed economies. And, unlike other emerging economies, African banks typically do not rely on foreign borrowing to finance their domestic lending. To the contrary, subsidiaries of European parent banks typically have net foreign asset positions.

There will be important second-round effects, however, through international trade channels. Reduced worldwide demand for African exports, both commodities and other exports, will dampen economic growth and might thus expose the financial system to increased credit risk. The economic crisis in the United States and Europe will most likely also lead to a reduction in remittance flows. Reduced capital flows and increased lending risk can lead to a tightening of credit conditions and reduced access to credit. Collapsing equity prices can weaken financial sectors where banks have made loans to clients to purchase shares, as in Nigeria.

A second significant risk can arise through the channel of international capital flows. Like the rest of the developing world, Africa has recently benefited from the global liquidity glut, attracting significant capital inflows, especially in countries with large natural resources. With such flows predicted to decrease substantially in 2009, this will affect African economies significantly. The decrease in commodity prices will therefore hit commodity exporters twice—through reduced earnings and reduced capital inflows. Given the small size of African financial systems, even a small absolute drop in capital inflows can have a relatively large effect on these markets. The resistance of remittance flows—although these are also showing signs of weakness—to the economic downturn might mitigate its negative impact somewhat.

The large share of foreign-owned banks across Africa has brought stability over the past years, as we discuss, but also exposes the region to additional contagion risk. The crisis could possibly be transmitted to sub-Saharan Africa if financial distress among parent foreign banks in Western Europe leads either to a withdrawal of capital or to a calling in of loans made to their African subsidiaries. The first scenario seems unlikely, given the low levels of equity that European banks have in sub-Saharan Africa and the high returns on this equity, but because of the seriousness of the current predicament it cannot be excluded that cash-strapped foreign banks could withdraw capital as the crisis continues to unfold. In addition, the appetite for further investment might be significantly reduced. While the second scenario seems more likely, the overall dependence on foreign subsidiaries in Africa on parent bank funding is relatively low. The recent rise of pan-African banks might reduce the contagion risk from European banks, but to the extent that the home economies of these banks—mostly from Nigeria and South Africa—are also affected by the crisis, this might actually introduce additional contagion risk.

There will also be more lasting and perhaps serious impacts of the financial crisis in the more medium term, due to mounting pressures to lessen the impact of the crisis through fiscal stimulus, when the shallow depth of local sovereign and corporate debt markets result in rapid crowding out of private-sector lending by the banks, thus undoing recent years' deepening of private access to credit. Pressures may also arise—particularly in those countries exposed to the commodity price collapse—to bail out problem institutions suffering from rapid growth in non-performing loans. Finally, pressure will surely mount to intervene directly to support particularly vulnerable sectors through subsidized or directed credit.

A final—and somewhat collateral—impact can come through both changes in the overall international regulatory architecture, following the current crisis and currently under discussion in the G20 forum, as well as through repercussions from emergency measures taken in the United States and Europe on financial-sector policy debate in Africa. Take first the reform of the international regulatory architecture. There might be an impact through risk ratings for emerging market debt, which in turn makes lending to developing countries more expensive and less attractive. Similarly, higher capital requirements for large international banks might make them more reluctant to invest in developing country subsidiaries. Finally, the way weak banks in Europe are being resolved—nationalization or mergers—might have an impact on their subsidiaries in Africa.

In addition, the recent emergency measures in the United States and Europe—including widespread nationalization and bailouts—might have negative repercussions for financial-sector policy dialogue throughout the developing world, as they seem to suggest that government ownership and heavy-handed government intervention into the financial sector are again in vogue. While the final verdict on these different measures is still out, in as much as they are temporary they do not invalidate the general financial policy paradigm that has arisen in recent years. Governance failures and aggressive risk taking has taken place both in privately owned and government-owned financial institutions. The current crisis is the result not of too little but rather of misguided regulation that left out large parts of the financial system (investment banks and the "shadow financial markets") and relied on industries such as the credit rating agencies that had perverse incentives to overstate quality of securities. Finally, moral hazard on a macro-level ("Greenspan-Bernanke-put")[1] and on a micro-level (such as "too-big-to-fail" policies, the push for aggressive lending through Fannie Mae and Freddie Mac, etc.) have significantly contributed to the

(Cont'd.)

Box 1: The impact of the financial crisis on Africa *(cont'd.)*

boom and subsequent bust. An emphasis on heavy-handed regulation and restrictions on financial institutions and markets is therefore not called for. Further, the harmful experience of decades of bank government ownership is in no way negated.

However, while financial underdevelopment seems, prima-facie, to help countries isolate themselves against immediate contagion risks, it also reduces the ability of the real economy to cushion the impact of the current crisis. Cross-country experience has shown that a critical function of the financial system is to diversify risk not only across firms but also over time, and a robust system can help smooth the impact of shocks.[2]

Source: This box is based on background work by Antonio David, Smita Wagh, Giulia Pellegrini, and Uzma Khalil from The World Bank.

Notes

1 This refers to the expectations of financial institutions and other financial market participants to be bailed out in times of widespread fragility, expectation that have been mostly fulfilled.

2 Bacchetta and Caminal, 2000.

countries in the 1980s and 1990s. By now, a consensus is emerging that again sees a prominent role for governments, beyond providing macroeconomic stability and the institutional framework, by taking a more active but market-friendly approach.

Supported by international financial institutions, in the 1960s and 1970s governments had traditionally a decisive role in African financial systems, ranging from regulatory restrictions (interest rate ceilings and floors, etc.) to directed credit programs and government ownership of banks and development finance institutions (DFIs). This *activist approach* aimed at replacing markets that did not exist at the time of independence, with governments being directly involved in providing financial services. The goal was to support sectors and industries that were traditionally shut out of the market-based financial system, such as agriculture, small-scale industries, and industries depending on long-term finance.

The outcome of these market-replacing efforts has been disappointing, both on the financial- and the real-sector sides. This can be explained by flaws in the two main assumptions of the market-replacing approach. The first is that governments know better than markets, and the second is that governments act in the best interest of society. Both assumptions have been proven wrong across the developed and developing world. Bureaucrats have turned out to have limited knowledge and expertise for running financial institutions and systems and they do not maximize society's welfare, but are rather subject to political and regulatory capture—that is, influence from the political sphere and the regulated entities, as hypothesized by the private-interest view.[16]

Again following the advice of international financial institutions, many countries in sub-Saharan Africa started liberalizing and privatizing their financial systems in the 1980s and 1990s. While the Washington Consensus cannot be exactly seen as a laissez-faire approach, it puts a heavy emphasis on markets over government. There is a focus on monetary stability, market-based price finding, and market-based provision of financial services. At the same time, disenchantment with the DFIs resulted in drying up of donor funding for these institutions.

Sub-Saharan Africa has made significant progress in monetary stability. With the exception of a few outliers, most notably Zimbabwe, the majority of African countries has achieved inflation below 20 percent over the past few years. Sub-Saharan Africa has also made substantial progress in private ownership of banks. With a few exceptions—such as Eritrea, Ethiopia, and Togo—most countries' banking systems are today dominated by privately owned financial institutions, be they domestic or foreign.

These reforms and their achievements in monetary stability and private ownership, however, have only partly fulfilled their promise. African financial systems are significantly more stable than before. The write-down of bad loans has led to a shrinking of the financial systems in some countries, but overall financial intermediation has improved in many countries. As discussed above, many countries have started to reap the benefits of reforms of the 1990s that were politically often difficult. Despite this progress, however, Africa's financial systems are still characterized by their shallowness; by their high costs, exemplified by high interest rate spreads; and by limited access to finance, as maintained in the previous section.

Disappointment with some of the outcomes of the modernist approach adopted through the past two decades of African financial-sector reforms has fostered yet another swing back toward more government involvement. This time around, however, African governments have leaned more toward a market-friendly role that creates and enables markets instead of trying to replace them.

Over the past 10 years, there has been increasing emphasis on going beyond macro-stability toward strengthening the underlying institutions to build an efficient and stable financial system, including robust contractual and informational frameworks and incentive-compatible regulation and supervision. This policy approach can be referred to as a *market-developing* approach—creating markets rather than replacing them (see Box 2). Unlike both the activist and modernist agendas of previous decades, the agenda of this new market-developing approach is daunting, as it involves

Box 2: Deepening and broadening financial system: A taxonomy of policies

To understand the role and impact of different government policies on deepening and broadening financial systems, Beck and de la Torre suggest a taxonomy that builds on the concept of the access possibilities frontier—the maximum commercially viable outreach of a country's financial system given certain "state variables" that do not change in the short term, such as market size; macroeconomic fundamentals; available technology; the quality of the transport and communication infrastructure; the effectiveness of the contractual and informational frameworks; and the degree of general insecurity associated with crime, violence, terrorism, and so on.[1] One can then identify the problem of the financial system as being either below or unsustainably beyond the frontier or facing a frontier too low relative to countries of comparable levels of economic development. The types of access problem can be mapped into different policy options that focus on (1) developing, (2) enabling, or (3) harnessing markets. These different policies all contrast with market-replacing policies, which have mostly led to financial-sector deepening that is unsustainable, if any deepening at all.

If the main problem is that of too low an access possibilities frontier, the policies to highlight would be *market-developing policies*—that is, those that aim at improving the state variables and moving the frontier and thus involve fundamental reforms such as improving macroeconomic stability, building a privately owned financial system, and improving the contractual framework. In some countries, non–financial-sector policies, such as improving security or upgrading the transport and communication infrastructure, might be the critical areas to push out the frontier.

Changes in the state variables involve changes in fundamental institutions and, thus, take a long time to materialize. To the extent that a financial system is operating below the possibilities frontier, there is room for *market-enabling policies* that might help deepen and broaden the financial system even in the absence of perceptible changes in state variables. Where the main reason for being below the possibilities frontier is the demand problem of self-exclusion, the appropriate policies would emphasize raising financial literacy, both for households and for enterprises. If—as is more likely—the main problems reside with sub-optimization in credit supply, a wider range of policy options can be considered, starting with competition policy, allowing entry from reputable market players and securing access to the payment system for all financial institutions. This also includes reviewing barriers stemming from bank regulation and AML/CFT regulation that might reduce banks' appetite for expanding lending and their customer bases.

A third category of government policies, defined as *market-harnessing,* tries to prevent the financial system from moving to an unsustainable equilibrium beyond the frontier because of imprudent lending. Market-harnessing policies therefore aim at keeping banks' incentives to take aggressive risks in check through a mix of measures aimed at strengthening market and supervisory discipline. Market-harnessing policies are also important on the demand side to avoid predatory lending, which results in unsustainable overborrowing by individual borrowers.

Note

1 Beck and de la Torre 2007.

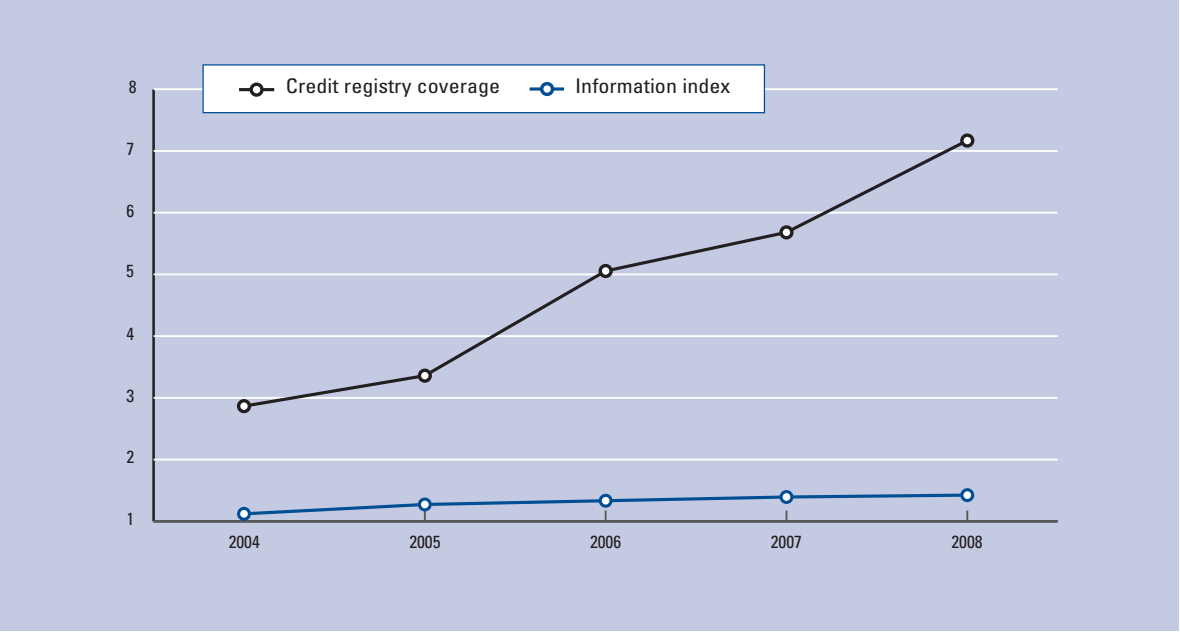
long-term institution building. It ranges from developing the contractual framework to informational requirements (such as accounting and disclosure standards) and strengthened bank regulation and supervision. It goes beyond transplanting laws and rules from the developed world to building up local capacity and norms. The role of governments in this context is a difficult one—it entails going beyond setting the rules, but without suppressing private initiative.

The institution-building agenda in the contractual system is substantial and reflects the deficiencies in the respective laws and their enforcing institutions. It ranges from modernizing bankruptcy legislation to improving the court system or building alternative dispute resolution mechanisms and establishing or improving asset and collateral registries. Few countries in Africa currently have credit registries or credit reference bureaus, an indispensable part of an effective and competitive system of financial intermediation. Many central banks and regulatory authorities still do not have political and operational independence; they have limited supervisory skills and lack the required enforcement powers.

Recent cross-country research has helped identify some priorities within the institution-building agenda. Specifically, improvements in the contractual framework, such as creditor rights, have a relatively larger effect on financial intermediation in high-income countries, while improving credit registries has a relatively larger impact on financial deepening in low-income countries.[17] A second piece of evidence on reform prioritization comes from the transition economies of Eastern Europe and Central Asia. Focusing on enforcement mechanisms for simple contractual arrangements such as collateral recovery can result in more benefits than reforming more complicated multi-stakeholder conflicts such as bankruptcy.[18]

In addition, legal system reforms have to be context-specific, particularly with respect to the legal tradition.

Figure 11: The development of credit registries in Africa



Source: IFC, 2009.
Note: The series are the average for the credit information index (from 0 to 6) and the proportion of adult population covered in a credit registry, respectively. In case there are both public and private registries, the larger number is used.

In spite of their shortcomings and deficiencies, court systems in the former British colonies still have a reasonable reputation. They can rely on a large body of case law and precedents, from London and other parts of the former British Empire. What courts in many common-law countries in Africa are lacking are capacity and financial sector–specific skills. The introduction of commercial courts might be helpful in this context. The situation in most Civil Code countries in Africa is different, as courts in these countries have deficiencies along many dimensions and suffer from very poor reputations. In these countries, establishing alternative dispute resolution systems might be more helpful.

Cross-country comparisons using Doing Business indicators show that Africa has made progress in reforming the contractual and information framework. The average cost of contract enforcement across sub-Saharan Africa has dropped from 56 percent of a typical debt contract in 2003 to 49 percent in 2008, while it has increased from 28 percent to 29 percent in the rest of the world. Such diverse countries as Ghana, Mozambique, and Rwanda have implemented reforms to reduce the number of procedures and the time it takes to enforce a contract. While there has been only little progress in establishing new credit registries over the past years, the existing ones, both private and public, have expanded their penetration (Figure 11). Although these numbers are often driven by a few reform-minded governments, such reforms can have important demonstration and contagion effects across the region.

Beyond institution building, there are other shortcuts that have been identified through experience and that can be summarized under the heading *market-enabling* policies (Box 2). Creating the necessary legal and regulatory frameworks for leasing and factoring is among them, as both financing techniques are especially conducive for small- and medium-sized enterprise (SME) lending. The regulatory and supervisory framework can also be an important lever for financial deepening and broadening, beyond its important stability role. Specifically, the regulatory framework can critically influence the degree of competition and innovation in a financial system. Allowing entry from new reputable market players, be they domestic or foreign, can be important to maintain contestability and competition, especially in small financial markets. Adjusting loan classification and capital requirements so as not to bias against agricultural or SME loans can be important, as the following two examples illustrate. Adapting the loan classification system to allow bullet loans rather than forcing quarterly repayments can help agricultural lending synchronize with farming cycles. The lower tail risk of SME loans—that is, the lower probability of very high loan losses—would imply lower capital charges for SME lending in spite of their higher overall riskiness.[19] Another important area of competition where government action might be necessary is that of ensuring access to payment systems and other network services on an equal basis for all financial institutions—incumbent and new—that qualify under fit and proper criteria. Finally, the current push for and

implementation of tougher anti-money laundering and combating the financing of terrorism (AML/CFT) regulations has critical repercussions not just for financial integrity and stability, but also has potentially negative consequences for the deepening and broadening of the financial system.

Sometimes the role of government in fostering access might have to go beyond competition policies and take the form of affirmative regulatory policy. Examples include the moral suasion exercised by authorities to make South African banks introduce the Mzansi (basic transaction) Account. Inducing banks to share or ensure interoperability of payments infrastructures (including ATM networks) can help avoid undesirable competition on access to infrastructure while enhancing desirable competition on price and quality of service, thereby facilitating the achievement of cost-reducing scale economies and lowering entry barriers to new financial service providers.

Moral suasion can be an important policy lever, but has its limitations. Larger countries with larger potential markets might have an easier time coaxing their banks into taking certain actions (such as establishing basic transaction accounts or opening up network services) than smaller markets. Further, there is a fine line between moral suasion and political interference, as the recent example of Uganda has shown. Frustrated by the disappointing results of earlier attempts to increase access to financial services, in early 2006 the Ugandan government announced its intention that each district should be serviced by at least one financial institution. In those districts where no financial service provider was in operation, the government mandated the establishment of savings and credit cooperatives (SACCOs) to be supported with payments, services, and so on supplied by the poorly managed government-owned Postal Savings Bank.

Market-enabling policies can also try addressing hindrances such as coordination failures, first mover disincentives, and obstacles to risk distribution and sharing. Although not easy to define in general terms, given their variety, these government interventions tend to share a common feature in supporting incentives for private lenders and investors to engage without unduly shifting risks and costs to the government.[20] These market-promoting interventions also provide a new role for existing DFIs beyond retail lending, although their success will require adjustments in their business models and governance structures.

One of the major challenges with any government-based solution is establishing a governance structure that avoids political capture of the program and expropriation of the benefits by the few connected. This is where donors as well as regional institutions can play an important role, as they are more removed from direct political pressure at the national level.[21]

In the context of the on-going global crisis, *market-harnessing* policies are again on the top of policymakers' agenda. There seems to be a need to strengthen crisis-preparedness including cooperation between authorities —such as central banks, ministries of finance, deposit insurers, court judges, tax authorities, and so on—in designing and implementing financial institution resolution practices. Lender-of-last-resort, liquidity management, and payment systems routines and infrastructure are often ill-prepared in sub-Saharan Africa, cumbersome in operation, and highly discretionary. Bank resolution practices are often open to endless, arbitrary court challenges, and deposit insurance schemes are slow to pay out depositors and unable to liquidate efficiently, if at all. Thus, by improving their crisis-preparedness, African countries will not only be able to improve their ability to respond to possible immediate difficulties, but can also address long-standing development needs supporting the preservation of asset values in situations where financial institutions must undergo restructuring or be resolved.

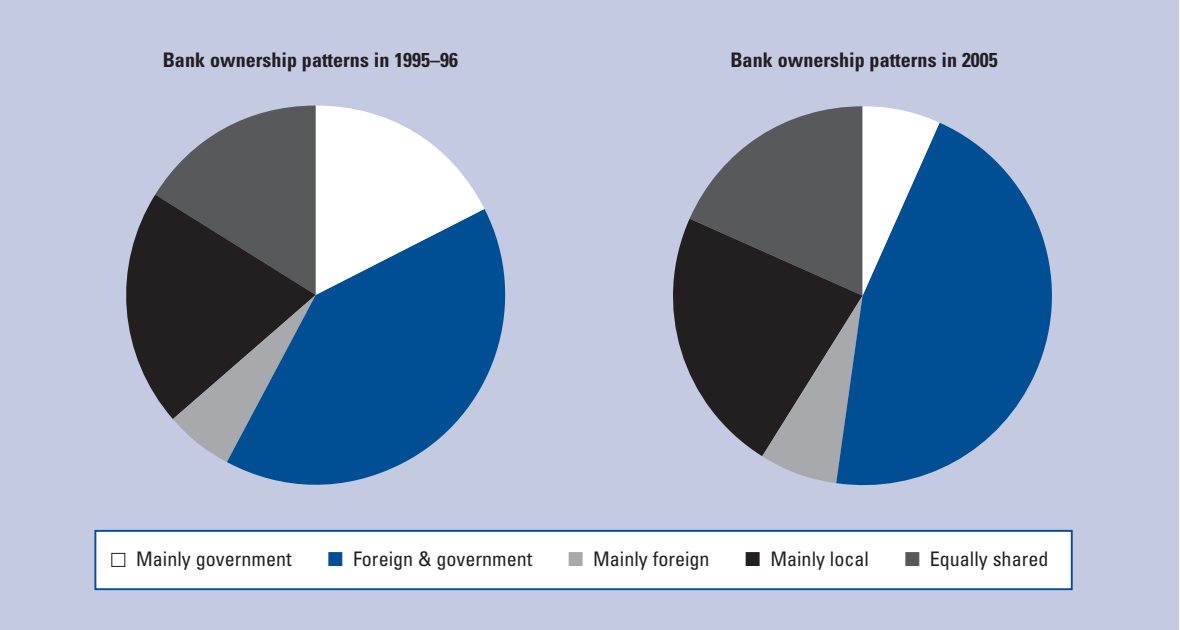
The challenge of globalization

Integration into international financial markets has been a second important and controversial aspect of financial-sector policy over the past decades. Although capital account restrictions are still in place in many countries, these are often more de-jure than de-facto. And while capital account liberalization has many benefits, it has to be managed carefully on the macroeconomic level and accompanied with appropriate regulatory policies. The benefits of increased capital inflows will be reaped only in the presence of well-developed local financial institutions and markets, but capital inflows can in turn accelerate financial and institutional deepening.[22] As in the case of government interventions, a context-specific and pragmatic approach is therefore called for.[23]

While there has been a focus on opening capital accounts toward developed countries, the potential of regional financial integration has been much less exploited, although there are large economies of scale to be reaped by cooperation in technical areas such as harmonizing approaches to bank regulation or payment systems.[24] Reducing if not eliminating intra-regional capital account restrictions can help deepen and broaden financial systems within the region. It allows more efficient risk diversification for financial and non-financial corporations alike. It can help overcome the scale problem for financing large projects, such as those in infrastructure. While reducing dependence on international capital markets to a certain degree, such intra-regional capital account liberalization seems less risky than complete capital account liberalization vis-à-vis international investors.

Unlike capital account liberalization, foreign bank entry has been less controversial in the academic literature, though more so in the political arena. At the time

Figure 12: Bank ownership in Africa over time



Source: Honohan and Beck, 2007; authors' calculations.
Note: *Mainly government* (foreign, private) means more than 60 percent of total assets of the banking system are of this ownership form; *Foreign & government* means these two together hold more than 70 percent; *Equally shared* is a residual category.

of independence, most sub-Saharan African countries started with foreign bank–dominated banking systems but subsequently nationalized them. After the disappointment with government-owned banks, many countries started privatizing again. In many countries, privatization was to foreign banks, since there were no domestic resources and skills. While in the mid 1990s less than a quarter of banking systems were dominated by foreign-owned banks and many countries still had predominantly government-owned banking systems, by 2005, more than half of the region's countries had a banking market with either a dominant or a significant share of foreign-owned financial institutions (Figure 12).

Foreign bank entry has several advantages that are specific to Africa: international banks can help foster governance, they can bring in much-needed technology and experience from other parts of the region (in the case of South African or Nigerian banks), and they can help exploit scale economies in their small host economies (Box 3). Where increasing the role of foreign banks is part of a broader reform strategy to build and deepen the necessary institutional infrastructure for financial deepening and broadening, as discussed above, foreign bank entry can be a catalyst for improvement.

Foreign bank entry can help, but is not sufficient to improve the efficiency of intermediation and the availability of credit. There are many factors that can prevent countries from reaping the potential benefits of foreign bank ownership. The presence of dominant government-owned banks can reduce competitive pressures and allow other banks—domestic or foreign-owned—to earn rents from the inefficiency of government-owned banks, as the example of Kenya shows. The absence of a sound contractual and informational framework reduces the feasibility of small business lending, as seen in Zambia where lending to the private sector as a percentage of GDP remains low despite two decades of financial liberalization. The small size of many financial markets in sub-Saharan African markets might make foreign banks reluctant to incur the fixed costs of introducing new products and technologies. The small size of many markets also does not allow for the necessary competitive pressure. The result in many sub-Saharan African countries has been a concentration of both domestic and foreign banks' portfolios on government papers and international assets and a shying away from private-sector lending.

Nevertheless, the recent new generation of foreign banks in Africa has been more beneficial for outreach. The new wave of foreign bank entry after liberalization in the 1980s and 1990s has seen not only the return of old colonial banks but also some new important players, such as several South African banks; banks from non-African regions other than Europe; and several regional banks, such as the Bank of Africa and Ecobank. Several banks have established a franchise in supporting the development of financial access, such as the Dutch Rabobank with (controlling minority) stakes in banks in Tanzania, Zambia, and Mozambique; and more recently the Nigerian Access Bank, with a focus on improving

Box 3: International experience with foreign bank entry

The market share of foreign-owned banks has increased across the developing world over the past 20 years, especially in Latin America and Eastern Europe and Central Asia. This entry has been partly fostered by financial liberalization in the host countries and partly by the need for the recapitalization of failed government-owned banks. The variation across countries and over time has allowed an assessment of the impact of foreign bank entry on depth, efficiency, stability, and access in the host countries.

Foreign bank entry and participation has, more often than not, had a positive effect on efficiency and stability of host countries' financial systems, with varying effects on outreach.[1] Cross-country evidence has confirmed that foreign-owned banks are more efficient than domestic banks in developing countries, and that foreign bank entry can indeed exert competitive pressure on domestic banks to become more efficient except in economies where small size, high concentration, or regulatory restrictions on bank entry reduce contestability and competition. Critically, foreign banks can help reduce connected and politicized lending, as they typically operate at arm's length from the ruling political and economic elites of their host countries. This can help improve competition in the real sector and overall governance in the economy. Foreign banks can also have a stabilizing effect on host countries' credit markets. Foreign banks typically show less volatile lending behavior and help smooth business cycles in the host economies, relying on deep pockets of their parent banks. While contagion risk from foreign banks' home countries to the host economies has appeared to be of little risk so far, the ongoing global crisis might change that.

In terms of outreach, the experience is mixed, with the effect depending on the mode of entry (greenfield versus merger), retail orientation of the foreign bank, and, most importantly, the contractual and information frameworks and competitive environment in the host country. On the one hand, foreign banks have been known to bring in new lending techniques that can overcome information problems and high costs of lending small amounts, thus expanding access to these borrower groups. On the other hand, in economies with weak contractual and informational frameworks, foreign banks might focus on large enterprises with tangible assets to use as collateral or international connections, thus shunning the small enterprise segment because they do not have access to the necessary soft information and relationship lending technique. But even if foreign banks are less inclined to serve small and medium-sized enterprises and poorer households, they do exert competitive pressures on domestic banks to go down market.

The empirical evidence of the impact of foreign banks on financial deepening and broadening has been mixed. Bank-level evidence often points to the reluctance of foreign banks to cater to smaller enterprises, while firm-level evidence does not report any adverse effect of foreign bank entry for these firms. The evidence also varies across regions, with the effect being overwhelmingly positive among transition economies of Central and Eastern Europe, where foreign bank entry was part of a critical policy package to sever connections between financial sector and state-owned enterprises and overcome the banking fragility of the 1990s. The evidence of Latin America, on the other hand, is rather mixed, and very much a function of the competitive environment of the host country.

Note

1 See Cull and Martinez Peria 2007 for an overview.

access to finance by SMEs with subsidiaries in West Africa as well as in Kenya and Zambia. Many of these new entrants have put a much higher weight on sustainable outreach, introducing new products and technologies.

The example of Uganda shows the positive impact that foreign bank entry can have on access to financial services in Africa. The South Africa Standard Bank purchased the largest government-owned bank after a first failed privatization and subsequent renationalization. Over the past years, Standard Bank did not only fulfill its commitment to not close any branches, it even opened new ones, and it increased lending to the agricultural sector.[25] However, this rather successful privatization also shows that foreign bank entry is not a panacea. Standard Bank still dominates the national banking market as well as many of the small up-country local markets. This lack of competition might have reduced the benefits arising from the shift from a government-dominated financial system to a privately owned financial system.

In a nutshell, Africa has gained a great deal from foreign bank entry in the past decade, including from the entry of pan-African banks. Finance is now more sound and efficient, but foreign bank entry is not a universal remedy. Only in competitive environments with effective contractual and especially informational frameworks can host economies and societies reap maximum benefits. The experience of the past decade has also shown that countries should choose their foreign banks carefully. Countries such as Mozambique, Tanzania, and Uganda had to renationalize their just-privatized banks as the foreign purchasers turned out to have insufficient resources or management skills. It was not until the second round that privatization was successful.[26] In spite of

the overall stabilizing role of foreign bank participation, one should not downplay the risk of a foreign subsidiary dominating the financial system if the parent company is in trouble—a scenario that has become again more likely in the current global financial turmoil.

Although beneficial for efficiency and outreach, the rising South-South financial integration also poses challenges for supervisory authorities. There is an increasingly pressing need to improve reporting, accounting, and disclosure practices, and also to develop and respect memoranda of understanding among supervisory bodies regarding exchange of information on the soundness of financial institutions. Although there are no signs of the withdrawal of foreign banks, the risk remains and supervisory authorities in Africa need to be aware of any such risks to be able to prevent or, if not prevent, to prepare for orderly exits, should they occur.

Finally, the lack of regional integration has reduced the benefit that sub-Saharan African countries can gain from foreign bank entry. By harmonizing bank regulatory frameworks, authorities could reduce regulatory costs for banks active across several countries of the respective region. Allowing banks to establish branches in other countries rather than having to establish subsidiaries could reduce the costs of market entry—by reducing costs of, among other aspects, multiple corporate structures—and foster competition. It is important to note, however, that introducing such a "regional passport for financial services" approach requires at least supervisory convergence, if not integration, as the current crisis experience in Europe shows.

Looking forward

Africa's financial systems have seen deepening and broadening over the past years, the result not only of improvements in the macroeconomic and institutional framework, but also of the worldwide liquidity glut, which directed more capital flows into Africa. The current global crisis threatens to reverse this trend and undermine this recent progress. In these adverse circumstances, it is even more important to upgrade the necessary frameworks for sound, efficient, and inclusive financial systems. As we have discussed in this chapter, this work calls for further institution building—such as judicial reform and the establishment and reform of collateral and credit registries—as well as cautious and context-specific government intervention to help financial market participants expand financial services to the frontier of commercially sustainable possibilities. Efforts to deepen financial sovereign and corporate bond markets need to be intensified, to improve the capacity for local debt financing, to provide instruments of suitable maturity and security for longer-term savings, and to facilitate the financing of African infrastructure.

These market-enabling policies require strong authorities that take an active role in redefining regulatory frameworks to include competition, inclusion, and efficiency as goals, while crowding in rather than crowding out private initiative. In those situations where governments are called upon to intervene in financial markets, they have the opportunity to provide market-conforming interventions, such as partially guaranteeing credit to groups of borrowers, such as SMEs, that are vulnerable to crowding out, while encouraging private banks to go further down-market and develop expertise in credit risk assessment. This policy approach implies a new role for development finance institutions on the wholesale and coordination level rather than retail lending. These policies also call for the embracing of technology to leapfrog in the attempt to broaden the outreach of the financial system. The fall-off in remittance flows intensifies pressure on governments to facilitate reduction in the pricing of remittance transfers by opening competition among money transfer operators, lessening the costs of the domestic leg of transfers through interoperability between payments service providers, and leveling the playing field between providers of mobile-banking services and similar services provided by banks.

The current crisis also calls for a cautious approach to opening capital accounts. A premium should be put on regional integration to reap benefits from scale economies. While the time may not be right for opening capital accounts, the current crisis should not be used as a pretext for re-imposing capital controls, given the negative repercussions such controls have for macroeconomic discipline and governance. The region stands to gain a great deal from the presence of both global and regional financial institutions in terms of efficiency, competition, stability, and outreach. Foreign bank entry, however, is not a panacea and cannot substitute for the necessary domestic reforms.

For better or worse, the future of Africa's financial systems is closely linked to the development of global finance, as are its real economies. However, it is up to Africa's financial sector stakeholders—bankers, donors, and policymakers—to guide financial sector reforms in a way that maximizes Africa's opportunities.

Notes

1 This is not to downplay the reverse causation from economic development to deeper and more sophisticated financial systems.

2 Beck et al. 2000; Love, 2003; Wurgler, 2000.

3 Rajan and Zingales 1998.

4 Beck et al. 2005.

5 Demirgüç-Kunt et al. 2006.

6 Beck et al. 2007.

7 We denote *spreads* as the difference between ex-ante contracted loan and deposit interest rates and *margins* as the actually received interest (and non-interest) revenue on loans minus the interest costs on deposits (minus non-interest charges on deposits).

8 Honohan and Beck 2007; Beck and Hesse 2009.

9 Honohan and Beck 2007.

10 Beck et al. 2008; World Bank, 2008.

11 Beck et al. 2008. The 2 percent assumption is based on Genesis 2005. Fees on savings accounts are typically lower and many of these countries also have (postal) savings banks that offer basic accounts, but these accounts typically do not have the same functionality and many savings banks offer services of limited quality—that is, long queues and limited access to funds.

12 IMF 2008.

13 IMF 2008.

14 IMF 2008.

15 Domowitz et al. 2001.

16 Barth et al. 2006.

17 Djankov et al. 2007.

18 Haselmann and Wachtel 2007.

19 Adasme et al. 2006.

20 An analysis of these types of "market-friendly roles for the visible hand" in Latin America is found in De la Torre et al.(2007), which presents case studies of such intriguing examples as: (1) the creation of an Internet-based market for the discounting of post-delivery receivables by SMEs in Mexico; (2) a Chilean program to promote lending to SMEs via the auctioning of partial government guarantees; and (3) a variety of structured finance packages orchestrated by a Mexican development fund to finance agricultural production (e.g., shrimp, corn). Examples in Africa might include the partial credit guarantee, with 50-50 risk sharing, established by the Bank of Tanzania, and the World Bank-supported Africa Trade Insurance Facility. Another important area where DFIs can help is in infrastructure financing, where private market players are often reluctant to enter given political and economic uncertainty and the current global crisis has reduced the necessary risk appetite for foreign investors even further. The role of the Development Bank of South Africa in catalyzing private participation in projects at the municipal level is also an interesting example to study.

21 Learning from positive examples within the region is also important in this context. The governance structure of the Development Bank of South Africa (DBSA) has been studied extensively in this context (Scott 2007). The African Association of DFIs has also established a set of governance guidelines.

22 See Kose et al. 2009 for a more detailed discussion on the threshold values for benefits from capital account liberalization and its "collateral" benefits.

23 For a more in depth discussion, see Beck et al. 2009.

24 World Bank 2007b.

25 Clarke et al. 2009.

26 World Bank 2001.

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CHAPTER 1.3

Restructuring for Competitiveness: The Financial Services Sector in Africa's Four Largest Economies

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This chapter reviews the broad financial-sector reforms in each of the four largest economies in Africa in the context of globalization and internal factors that may have influenced their form and impact. It examines the sector's transformation caused by the movement toward financial consolidation in large economies such as South Africa and Nigeria by way of bankwide mergers and alliances, and considers the likelihood of consolidation extending across segments of the sector given the potential synergies between the banking, securities, and insurance sectors and the impact this would have on enhancing competitive conditions in financial services. A fundamental goal of these financial-sector reforms is to enhance the competitive conditions in financial services in African economies.

The role of competitive financial sectors in Africa is crucial for economic development, particularly in light of the evidence of the positive relationship between finance and growth.[1] Moreover, the issue of competition in the financial services sector in Africa has important implications, especially for enhancing productive efficiency, financial stability, and effective regulation and supervision. These implications have possible positive spillover effects to the rest of the economy, or indeed from one African country to the rest of the continent.[2] The idea is that competition stimulates productivity growth either through general technical progress or through improved efficiency, or both. Competition is also postulated to exacerbate the moral hazard problem of financial institutions, especially banks. The main lesson for policymakers is that, in order to achieve a highly competitive financial services sector, African countries must undertake some fundamental reforms, especially with respect to banks and capital markets. Hence, we seek to identify lessons from the experience of highly reforming and/or highly competitive economies in Africa for the rest of the continent.

An important challenge facing policymakers in Africa, while the financial-sector reforms are *in situ,* is to figure out how to reliably measure and monitor the competitive conditions in the sector. This is especially important at this stage of financial globalization, and while the world is threatened by a global financial crisis initiated in late 2007 with the subprime mortgage crisis in the United States. Although some traditional yardsticks, such as interest rate spreads, are in vogue in many African countries, what is desirable is a reliable metric, which can be empirically derived, to track the evolution of competitive conditions in the financial services sector, specifically banking services, over time. Hence, in

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Table 1: Financial market sophistication for SANE economies, 2008–09

Financial market sophistication indicator	South Africa	Algeria	Nigeria	Egypt	Mean benchmark for SANE
Financial market sophistication	12 (6.3)	130 (2.1)	75 (4.1)	95 (3.5)	78 (4)
Financing through local equity markets	4 (5.7)	118 (2.8)	3 (5.7)	49 (4.7)	44 (4.7)
Ease of access to loans	31 (4.2)	122 (2.2)	118(2.3)	79 (3.1)	88 (2.95)
Venture capital availability	29 (3.9)	118 (2.2)	84 (2.8)	46 (3.4)	69 (3.1)
Restriction on capital flows	111 (3.7)	131 (2.8)	93 (4.1)	80 (4.4)	104 (3.8)
Strength of investor protection*	9 (8.0)	50 (5.3)	39 (5.7)	67 (5.0)	41 (6.0)
Soundness of banks	15 (6.5)	134 (3.9)	87 (5.2)	111(4.7)	87 (5.1)
Regulation of stock exchanges	5 (6.1)	128 (2.8)	53 (5.0)	80 (4.3)	67 (4.6)
Legal rights index (hard data)*	52(5)	93 (3)	16 (7)	123 (1)	71 (4)

Source: World Economic Forum, 2008.
Notes: The figures give the rank for each SANE country out of a sample of 134 countries; the data in parentheses give the score based on a scale of 1 (= very poor by international standards) to 7 (= excellent by international standards), except where there is an asterisk where the scale is 0 (= worst) to 10 (= best).

this chapter, after examining the reforms recently implemented in Africa's four largest economies, we propose and demonstrate some plausible empirical metrics for measuring the competitive conditions in the banking sector in the economies of South Africa, Algeria, Nigeria, and Egypt (SANE) during their reform period. These metrics have an important potential for use by policymakers, bank regulators, and bank managers to monitor the evolution of bank competitive conditions over time.

Why financial sector reforms in the SANE?

Rather than take a pan-African approach and look at each of the 53 economies in Africa, the chapter focuses on financial-sector competitiveness in the SANE economies, which are Africa's four largest. These economies registered stable positive GDP growth rates during 2007–08, sometimes almost comparable to the growth rates exhibited by the BRIC economies among the emerging markets (see Appendix Table A1). For example, although the GDP growth rates for all the SANE economies fell below the rates attained by Russia, India, and China during 2007–08, Egypt and Nigeria achieved higher growth rates than Brazil. The average for the SANE economies was 5.8 percent, although these rates are forecast to fall during 2009–10 because of the global financial crisis.

The SANE economies are predominant in the financial services sector in Africa, especially in banks and capital markets. However, it is interesting that the SANE economies have smaller banks and capital markets than their BRIC counterparts. For example, the SANE economies together host a large proportion of the total number of banks in Africa, altogether representing 164 banks out of a total of 741 banks in Africa, or 22.1 percent (Appendix Table A1). However, the number of banks in the SANE economies is far smaller than it is in Brazil, Russia, India, and China: the number of banks in the BRIC economies (769) exceeds the total number of banks in all of Africa (741). The total number of non-bank financial institutions in the SANE economies is 914; this is 1,543 in the BRIC economies. The predominance of the SANE economies in the African banking sector is still evident in the total assets of the banking sector in each country.

Besides commanding a large percentage of Africa's population and GDP, the SANE economies account for more than two-thirds of Africa's largest 1,000 companies and 30 of the largest 50 African banks. Also, in 2008, the SANE economies accounted for over half of foreign direct investment (FDI) to Africa, and two and half times the FDI to India. Hence, the financial services sectors in the four economies have the potential to become growth poles in Africa's financial-sector development and economic growth. Moreover, by taking the four largest economies, we implicitly place the performance of countries in the African region into an international context.

One important observation is that the SANE economies share the common goal of trying to attain globally competitive financial services sectors, including banks, capital markets, and insurance services. However, because the reform packages differ, and because of the disparities in institutional financial infrastructure, the outcomes are inevitably non-uniform. We highlight the differences in these four economies in terms of the sophistication and openness of the financial market in each country, compared to a common benchmark. Table 1 represents the financial market sophistication rankings for the SANE economies for 2007–08. It also presents a mean benchmark for all the SANE countries. Overall, the variations are such that South Africa emerges as having the most sophisticated and open financial markets in the group in all of the 10 subindicators used except the restriction on capital flows. Indeed, with respect to this particular indicator, Nigeria and Egypt appear more open than South Africa. Algeria is the weakest of the group for most subindicators, suggesting that further financial reforms are necessary. However, on the specific subindi-

Table 2: Nominal and real financial prices in the SANE economies, 2000–08

	Nominal deposit rate (%)				Nominal loan rate (%)				Real deposit rate (%)				Real loan rate (%)				Nominal spread (%)			
Year	Africa	Algeria	Nigeria	Egypt	Africa	Algeria	Nigeria	Egypt	Africa	Algeria	Nigeria	Egypt	Africa	Algeria	Nigeria	Egypt	Africa	Algeria	Nigeria	Egypt
2000	9.20	7.50	11.69	9.46	14.50	10.00	21.27	13.22	1.60	7.16	10.39	7.46	6.90	9.64	19.97	11.22	5.3	2.50	9.53	3.76
2001	9.30	6.25	15.26	9.46	13.77	9.50	23.44	13.29	2.70	2.02	–1.34	7.06	7.17	5.27	6.84	10.89	4.47	3.25	8.18	3.83
2002	10.77	5.25	16.67	9.33	15.75	8.50	24.77	13.79	1.47	3.83	0.27	7.13	6.45	7.08	8.37	11.59	4.98	3.25	8.10	4.46
2003	9.67	5.25	14.22	8.23	14.96	8.00	20.71	13.53	1.67	2.67	0.29	5.03	6.96	5.42	6.78	10.33	5.29	2.75	6.49	5.30
2004	6.55	2.50	13.70	7.73	11.29	8.00	19.18	13.38	2.15	–1.06	–0.23	–2.57	6.86	4.44	5.25	3.08	4.74	5.50	5.48	5.65
2005	6.04	1.75	10.35	7.23	10.63	8.00	17.95	13.14	–0.96	0.11	–5.03	–4.17	3.63	6.36	2.57	1.74	4.59	6.25	7.60	5.91
2006	8.25	1.80	7.89	8.26	11.75	8.00	17.26	12.87	3.55	0.20	–0.49	3.86	7.05	6.00	8.88	8.47	3.50	6.20	9.37	4.61
2007	10.25	1.80	7.75	9.00	13.75	8.00	16.49	12.60	3.15	–1.70	2.38	1.38	6.65	3.50	11.12	5.34	3.50	6.20	8.74	3.96
2008	11.75	2.00	11.88	6.97	15.00	8.10	17.39	12.20	4.75	–2.80	4.12	–5.03	8.00	3.30	9.63	0.20	3.25	5.90	5.51	5.23

Source: IMF, 2008.

cator of the strength of investor protection, Algeria ranks close to the mean benchmark and better than Egypt.

Table 2 highlights the differences in these four economies in terms of nominal and real financial prices for 2000–08. The spread between these prices in South Africa narrowed from 5.3 percent in 2000 to 3.25 percent in 2008, perhaps because of an increase in competition. Nigeria presents a similar pattern of increasing competition, especially after 2005. However, the spread actually went up in Algeria, from 2.5 percent to 5.90 percent, respectively, suggesting a noncompetitive environment; this scenario is consistent with the fact that the nominal loan rate was pegged at 8.0 percent for most of the period. There is also evidence of financial repression (negative real deposit rates) in 2007 and 2008. The scenario for Egypt is mixed. Further, each of the four countries seems to have suffered from some episodes of financial repression at some point during 2000–08: South Africa in 2005, Algeria in 2004 and again in 2007–08, Nigeria in 2001 and again in 2004–06, and Egypt in 2004–05 and again in 2008. By 2008, South Africa and Nigeria appear to have emerged from financial repression, perhaps as a result of strong financial-sector reforms.[3]

The emphasis on financial-sector reforms in these four large African economies is made more imperative given the threat to fragile economies in Africa posed by the global financial crisis. Indeed, this is one of the reasons we focus on reform of this particular sector rather than other determinants of competitiveness. In particular, one key aspect of financial reforms is important for the financial crisis: namely, implications of the financial crisis for financial regulation and liberalization. It may be argued that more open financial systems are more robust in the face of the financial crisis, but it may be argued equally well that open systems are prone to volatile capital outflows.

The remainder of this chapter is structured into four sections. The next section provides a largely anecdotal examination of the evolution of financial reforms and competitiveness in the financial services sector in South Africa, Nigeria, Egypt, and Algeria, respectively. We focus on reforms relating to banks, capital markets, and insurance services. A short section follows that highlights the methodology we use to measure the competitive conditions in the banking sector in each of the SANE economies over time, and we then report the result. The final section provides concluding remarks and the main policy implications.

Key aspects of financial-sector reforms in the SANE economies

Banking-sector reforms in the SANE economies show contrasting approaches that may be taken to enhance the competitive conditions in the sector. South Africa presents a case of gradual restructuring of the banking sector, during which time South African banks have spawned the financial services sector in the rest of Africa. Nigeria has bravely designed and implemented a shock-treatment type of banking-sector reform, which amounts to a "big bang."[4] The banking-sector reforms in Egypt give mixed signals in terms of effort and success, which seems to suggest that the country should really go the extra mile now. Algeria is characterized as a slow reformer; arguably it is high time that Algeria embraced full financial restructuring, given the efforts it has so far made and considering the need to mitigate the adverse effects of the raging global financial crisis.

In general, there is no viable "one-size-fits-all" approach to financial reforms. The banking-sector reforms in South Africa were not only comprehensive but were also carefully structured over a long period. Strong banks have emerged, which have gone global. This gradualist approach offers important lessons for the rest of the continent. But it is interesting that the big bang approach adopted by Nigeria has also worked; this suggests that, in some economies, shock treatment can achieve results very quickly.

Banking- and financial-sector reforms in South Africa

The key feature of the banking-sector reforms in South Africa is the gradual process that has spanned almost two decades, including complementary reforms in the capital market as well as insurance services (see Table 3 for the chronological sequence of the major banking-sector reforms).

Furthermore, South African banking institutions adopted their own internal policies to provide for greater participation in social regeneration programs. It would appear that these reforms have created new opportunities and challenges. Financial liberalization brought about greater competition for traditional domestic South African banks, but at the same time the banks became exposed to volatile international capital movements. South African banks were forced to adopt a more open attitude and a more international approach in the daily management of their activities.

Following the opening of South Africa's financial system in 1994, international participation in the local banking industry increased significantly, rising from 3 percent in 1994 to 9.5 percent of total banking-sector assets by the end of October 2004. There are now more than 10 foreign banks with formally established branches or subsidiaries in South Africa, and more than 60 international banks with representative offices in the country. These foreign banks provide enhanced competition for the South African banks, particularly in the fields of wholesale banking and international trade financing, and in the market for foreign exchange. In addition, electronic commercial banking, automated teller machines (ATMs), Internet and mobile banking, and issuance of debit and credit cards are some of the innovations that have increased. Hence, it may be argued that the reforms that encouraged foreign banks to operate in South Africa have improved the overall quality of service in the banking sector, and lower interest rates or higher deposit rates have increased so as to attract customers.

South Africa has established a relatively well developed banking system that compares favorably with those in many developed countries and that distinguishes South Africa from many other emerging market countries.[5] The South African banking system has remained stable and its banks are adequately capitalized, partly as a result of financial consolidation (see Tables 4 and 5). Banks maintained capital-adequacy ratios above the minimum requirement of 10 percent, which increased to 11.4 percent in December 2001 and then to 12.8 percent in December 2007. Growth in the total balance sheet remained strong during 2007. Banking-sector assets increased from 1,046 billion South African rand (R) at the end of December 2001 to R 2,547.0 billion at the end of December 2007, and showed an annual growth rate of 22.7 percent in 2007 compared to 23.7 percent in December 2006. Loans and advances, along with investment and trading positions, were the main contributors to the increase in banking-sector assets

Table 3: Key banking-sector reforms in South Africa

Year	Specific reform aimed at banking-sector competitiveness
1991	Risk-based capital requirements, in line with EU directives, were introduced for banks.
1996	Accounting and financial reporting by banks was required to conform to Generally Accepted Accounting Rules.
1998	The South African Reserve Bank (SARB) changed its operational procedures for providing banks with short-term liquidity: a repurchasing auction system was introduced where banks tender on a daily basis for liquidity provided by the SARB.
1999	The SARB introduced certain limits on the banks deposits in the Cash Reserve Contra Accounts (CRCA), which effectively limited the possibility for banks to use monthly averaging of required reserve holdings.
2001	Consolidated accounting rules for financial conglomerates (to avoid double counting of regulatory capital) were made mandatory for banking groups.
2001	Adopted a new securitization notice, under Basle II. Securitization broadened to allow banks to act as originator, sponsor, or repackager in a securitization scheme; also, the minimum prescribed capital requirement for all banks and mutual savings associations rose from 8 percent (as stipulated under Basle I) to 10 percent.
2002	The Bank Act 1990 was amended to compel all banks to establish sound risk management and corporate governance and to restrict certain investments made by banks (e.g., equity).
2003	Banks to develop a risk matrix to verify clients' identities, as per the Finance Intelligence Centre Act (FICA), making effective legislation against money laundering.
2004	Section 50 of the Bank Act provides that a controlling company must not invest more than 40 percent of the controlling company's share capital and reserve funds.
2005	The South African banking market was opened up for foreign banks. South African banks, in turn, were allowed to establish branch offices, subsidiaries, and representative offices in many countries around the world.
2006	The National Credit Bill was introduced to enable all South Africans to have access to credit at affordable rates. The National Credit Regulator and the National Consumer Tribunal were created to ensure enforcement.
2007	The Banking Association South Africa unveiled a code of conduct, agreed to by all major consumer lending banks, setting out a standard to which banks undertake to adhere with respect to lending practices.
2008	Implementation by the SARB of Phase 1 of the Integrated Cash Management System (ICMS) was launched, to improve the efficiency; also, all South African banks started operating under Basel II.

Source: Compiled by the authors from information contained in the series of South African Reserve Bank (SARB) Annual Reports, 1999–2007, and updated with new information released by SARB during 2008.

Table 4: Financial services indexes in South Africa, 2007

Type of index	2nd quarter	3rd quarter	4th quarter
Financial services index	97	98	98
Retail banking and specialized finance confidence index	100	94	95
Investment banking and specialized finance confidence index	100	100	100
Investment management confidence index	97	99	97
Life insurance confidence index	90	100	100

Source: South African Reserve Bank, 2008.

during 2007. Throughout 2007, non-bank deposits remained the primary source of funding for the banking sector; these deposits represented 65.1 percent of total liabilities and capital at the end of December 2007 (in December 2006, this was 65.2 percent). Total non-bank deposits increased from R 1,353.2 billion at the end of December 2006 to R 1,657.8 billion at the end of December 2007.

Profitability ratios were strong during 2007. The return on regulatory capital amounted to 18.1 percent at the end of December 2007, compared with 18.3 percent at the end of December 2006, while the return on assets equaled 1.4 percent at the end of both December 2006 and December 2007. The efficiency ratio improved from 58.8 percent at the end of December 2006 to 56.9 percent at the end of December 2007, while it was 64.2 percent in 2001. The liquid assets held exceeded the statutory liquid-asset requirement throughout 2007. The average daily amount of liquid assets held in December 2007 represented 112.5 percent of the statutory liquid-asset requirement (in December 2006, this was 111.2 percent).

Growth of mortgage loans relative to other assets has been strong, increasing from R 680.9 billion at the end of December 2006 to R 849.0 billion at the end of December 2007, representing an annual growth of 24.7 percent (in December 2006, this was 30.3 percent). Even though the growth rate in mortgage loans slowed during 2007, mortgage loans as a percentage of total loans and advances increased slightly, indicating strong growth. Overdrafts and loans increased from R 383.5 billion at the end of December 2006 to R 478.5 billion at the end of December 2007, representing an annual growth of 24.8 percent (in December 2006, this was 28.5 percent). The growth rate peaked at 36.8 percent in June 2007 and subsequently began to decline. Installment debtors increased from R 207.4 billion at the end of December 2006 to R 234.2 billion at the end of December 2007, representing an annual growth of 12.9 percent (in December 2006, this was 13.9 percent). Interbank loans and advances increased from R 91 billion at the end of December 2006 to R 122.4 billion at the end of December 2007, representing an annual increase of 34.5 percent (in December 2006, this was 26.0 percent). Credit card loans increased from R 43.9 billion at the end of December 2006 to R 55.1 billion at the end of December 2007, representing an annual growth of 25.5 percent (in December 2006, this was 40.8 percent).

During 2007, however, credit risk ratios deteriorated, with non-performing loans increasing from R 18.8 billion at the end of December 2006 to R 29.4 billion at the end of December 2007. Expressed as a percentage of total loans and advances, non-performing loans rose from 1.1 percent at the end of December 2006 to 1.4 percent at the end of December 2007. The increase in interest rates, together with other adverse developments in the South African and international economic environments, contributed to this deterioration. In addition, growth was somewhat distorted by securitization transactions that occurred during the year. Foreign-currency loans and advances decreased slightly from R 191.7 billion at the end of December 2006 to R 190.4 billion at the end of December 2007, representing a negative annual growth rate of 0.7 percent.

In general, the year 2007 enjoyed reasonable financial stability, as highlighted in Table 4. The financial services index increased from 97 in the second quarter to 98 in the third and fourth quarters. The investment banking and specialized finance confidence index as well as the life insurance confidence index remained stable at 100 during the third and fourth quarters of the year.

Table 5 shows that the banking sector in South Africa was strong, stable, and financially sound during 2001–07, perhaps because of the financial sector reforms: all indicators for capital adequacy, liquidity, earnings and profitability, sensitivity to market risk, and asset quality performed much better than the stated threshold or benchmark.

Banking and financial-sector restructuring in Nigeria

In contrast to the gradualist approach to banking reform in South Africa, Nigeria embarked on a big bang style of banking-sector reform that aimed to enhance the competitiveness of banks.[6] Specifically, the reforms introduced in July 2004 were characterized by a rise in the minimum capitalization for banks to 25 billion Nigerian naira (₦) by December 2005; a phased with-

Table 5: Financial soundness indicators for the banking sector in South Africa: Growth rates from January 2001 through December 2007

Indicator	Mean (percent)	Standard deviation (percent)	Threshold (percent)	Actual (percent)	Signal*
CAPITAL ADEQUACY					
Regulatory capital to risk-weighted assets	12.65	0.65	12.00	12.78	No
Regulatory tier 1 capital to risk-weighted assets	9.25	0.56	8.69	9.48	No
EARNING AND PROFITABILITY					
Return on assets	1.01	0.34	0.67	1.36	No
Return on equity	13.01	4.52	8.49	18.11	No
Interest margin to gross income	50.37	11.12	39.25	58.51	No
Non-interest expenses to gross income	64.28	11.32	75.60	48.64	No
LIQUIDITY					
Liquid assets to total assets	4.56	0.24	4.32	4.63	No
Liquid assets to short-term liabilities	8.89	0.71	8.18	8.71	No
SENSITIVITY TO MARKET RISK					
Aggregate net open position in foreign exchange to capital	1.65	0.76	2.41	0.69	No
ASSET QUALITY					
Non-performing loans to total loans and advances	2.20	0.86	3.06	1.38	No
Specific provisions to total loans and advances	1.52	0.45	1.07	0.86	Yes
Share of mortgage advances in private-sector credit	43.06	3.46	46.52	48.95	Yes

Source: South African Reserve Bank, 2008.
*Signal refers to whether or not the SARB should intervene on that indicator.

drawal of public funds from banks, which took effect in July 2004; and consolidation of banking institutions through mergers and acquisitions. In addition, bank regulation was revamped by incorporating and adopting a risk-focused and rule-based regulatory framework; adopting zero tolerance in the area of information reporting; introducing an electronic financial analysis and surveillance system (e-FASS) for automated submission of returns by banks and other financial institutions; collaborating with the Economic and Financial Crimes Commission (EFCC) in the establishment of the Financial Intelligence Unit (FIU) and the enforcement of anti–money laundering and other economic crime measures; and strictly enforcing the contingency planning framework for systemic banking distress during 2008. To expedite distress resolution, the formation of an asset management company has recently been announced.[7] The new reforms also emphasized the liability of the boards of failed banks.[8]

Table 6 presents performance indicators for the main banks in Nigeria as they stood after the introduction of the reforms. It is to be noted that, after the big bang, all bank performance indicators for each major bank satisfied high-quality benchmarks of return on equity, capital strength, asset size, and soundness. In addition, following financial consolidation, the depth of the financial sector increased as credit to the private sector rose from 26.2 percent in 2006 to 67.8 percent in 2007.[9] There was also an increase in savings from ₦1,082.0 billion in 2006 to ₦2,949.8 billion in 2007, of which commercial banks held 76 percent of the funds while other savings institutions—such as life insurance funds, pension funds, and microfinance banks (MFBs)—accounted for 24 percent. During the same period, the number of bank branches increased from 3,468 to 4,579 across all the states in the country. Consequently, the number of bank employees went up. By the end of 2008, the financial sector was the largest significant employer in Nigeria.[10]

An important element of Nigeria's financial reform relates to the payment system and the interbank money market. Payment system reforms were also put in place when seven banks were appointed as settlement banks for the clearing of checks. Between 2006 and 2007, the value and volume of clearing checks grew from ₦14.9 million to ₦19.9 million and ₦16.4 million to ₦28.1 million, respectively, reflecting the shift from noncash transactions to the use of checks by individuals. To encourage the use of checks, writers of dishonored checks were subject to fines and prosecution, and these penalties would be enforced. The introduction of the Central Bank of Nigeria (CBN) interbank fund transfer system for transferring funds among banks increased the value of transactions by 56 percent. The nonpayment of interest on standing deposit facility also instilled confi-

Table 6: Performance indicators for the main banks in Nigeria, 2005–07

Bank	Year	Return on equity	Capital strength (US$ thousands)	Asset size (US$ thousands)	Soundness of capital-to-asset ratio
Access Bank PLC	2005	0.035	110,986.07	527,788.58	21.03
	2006	0.025	227,887.73	1,376,716.35	16.55
	2007	0.214	223,873.26	2,591,806.87	8.64
Afribank Nigeria PLC	2006	0.092	213,419.28	1,035,335.92	20.61
	2007	0.122	223,172.35	1,441,135.44	15.49
Diamond Bank PLC	2005	0.122	163,422.71	987,321.93	16.55
	2006	0.110	276,220.93	1,761,831.00	15.68
	2007	0.128	425,685.44	2,466,427.49	17.26
Ecobank Nigeria PLC	2005	0.229	221,547.00	2,199,230.00	10.07
	2006	0.226	382,088.00	3,503,739.00	10.91
	2007	0.270	513,548.00	6,550,224.00	7.84
Fidelity Bank PLC	2005	0.136	71,065.50	349,359.12	20.34
	2006	0.123	201,272.31	1,188,857.43	16.93
First Bank PLC	2005	0.272	352,330.62	2,977,332.59	11.83
	2006	0.263	480,952.75	4,260,028.39	11.29
	2007	0.237	610,071.72	6,016,886.19	10.14
First City Monument Bank PLC	2005	0.110	57,000.12	405,357.56	14.06
	2006	0.107	208,517.55	842,111.29	24.76
	2007	0.187	244,619.77	2,075,875.90	11.78
Guaranty Trust Bank PLC	2005	0.147	284,765.26	1,321,925.00	21.54
	2006	0.213	320,018.43	2,402,020.00	13.32
	2007	0.274	373,460.26	3,766,389.00	9.92
Oceanic Bank PLC	2005	0.189	249,933.13	1,751,235.69	14.27
	2006	0.253	302,814.75	2,987,347.62	10.14
	2007	0.077	1,788,387.34	8,283,286.87	21.59
Platinum Habib Bank PLC	2005	0.055	101,771.43	415,360.75	24.50
	2006	0.084	229,023.16	1,245,029.76	18.39
	2007	0.211	290,414.35	3,046,216.31	9.53
Standard Chartered Bank	2004	0.267	38,451.37	269,179.30	14.28
	2005	0.091	206,611.15	531,285.17	38.89
Sterling Bank PLC	2006	0.04	211,570.16	881,546.84	24.00
	2007	0.072	215,437.25	1,173,429.85	18.36
Union Bank Of Nigeria PLC	2005	0.239	308,612.66	3,141,186.21	9.82
	2006	0.104	754,673.08	4,082,056.94	18.49
	2007	0.125	762,126.35	4,888,398.13	15.59
United Bank for Africa PLC	2005	0.262	142,299.03	2,001,028.93	7.11
	2006	0.24	382,805.46	6,842,773.31	5.59
	2007	0.12	1,324,927.65	8,861,318.32	14.95
Unity Bank	2006	0.148	21,889.28	263,223.93	8.32
	2007	0.12	244,091.90	908,352.05	26.87
WEMA Bank PLC	2005	0.034	191,331.10	772,214.37	24.78
	2006	-0.321	162,000.16	947,307.09	17.10
	2007	0.101	198,617.43	1,302,007.50	15.25
Zenith Bank PLC	2005	0.189	299,798.98	2,640,897.23	11.35
	2006	0.114	796,514.59	4,845,444.66	16.44
	2007	0.155	895,147.34	7,012,621.38	12.76
Intercontinental Bank PLC	2005	0.154	256,483.74	1,293,976.85	19.82
	2006	0.159	424,462.64	2,841,532.16	14.94
	2007	0.095	1,227,297.06	5,224,376.03	23.49

Source: Compiled by the authors from BankScope.
Note: Capital strength is measured by tier 1 capital. PLC is public limited company.

Table 7: Share of e-payment market by type of transaction, percent

Transaction type	2006	2007
ATMs	73.4	88.5
Internet	3.5	7.1
POS	23.0	4.3
Mobile	0.1	0.1

Source: Central Bank of Nigeria, 2008.

dence and encouraged banks to place and borrow funds between themselves and discount houses.

Electronic commerce also expanded with the increased use of ATMs, the introduction of Point of Sale (POS) terminals, the issuance of debit and credit cards, and Internet and mobile banking innovations, as shown in Table 7.

The country's financial reforms also saw an increase in the number of mergers and acquisitions, involving 89 banks. This resulted in 25—and then 24, after one bank was taken over—stronger, bigger banks. Some banks acquired other financial institutions such as stock-brokerages in order to offer wholesale or universal banking products. The emergence of strong, large banks has created a lot of healthy rivalry and competition, as financial institutions compete to attract more customers by offering attractive deposit rates and loan rates. Nigerian banks have invested in research and development to ensure that their level of services is up to an international standard, with more focus on personal banking. To assist the banks that were raising new funds from the capital market to reduce the cost of those funds and ensure a seamless transition, regulatory authorities gave them concessions.

Banking- and financial-sector reforms in Egypt

Egypt offers an interesting contrast to the financial-sector reforms in South Africa and Nigeria. The Egyptian banking industry is among the oldest and largest in Africa. Banking reform started in the early 1970s in Egypt, but the first stage of the country's modern financial-sector reforms occurred during 1990–96 and was aimed at full liberalization of the banking sector, in order to make the banks efficient and competitive. The foreign exchange market was liberalized in February 1991, and banks were allowed to set foreign exchange rates for trading foreign currencies. In 1992, interest rate ceilings were abolished for the private and the public sectors; lending limits were also eliminated in 1992 and 1993, respectively.

The second stage of the reforms (1996–2001) in Egypt continued with the liberalization of financial prices, and included privatization and deregulation. The third stage of the reforms (2002–07) included the introduction of the Financial Sector Assessment Program in 2002, which highlighted key priorities for financial-sector reform in banking and non-banking areas, and the Financial Sector Development Policy Loan in 2005, which included provisions for enhancing the investment climate. The period also involved comprehensive financial sector restructuring comprising bank mergers, privatizing state-owned banks, recapitalizing banks, resolving non-performing loans, modernizing the payments system, enhancing and monitoring corporate governance in all banks, and improving the overall legal and regulatory framework for financial activities.[11]

In 2002, the Central Bank of Egypt (CBE) required that banks raise their capital-adequacy ratios to meet Basel II standards. Following the Banking Law that was passed in 2003, the minimum capital requirement for all banks was raised to 500 million Egyptian pounds (LE) (approximately US$87 million). Subsequently, some bank mergers occurred—for example, in 2005 Banque Misr and Banque du Caire merged, as did the National Societe Generale Bank (NSGB) and Misr International Bank. It is to be noted that Egypt has been a member of the World Trade Organization (WTO) since June 30, 1995, and made commitments to the General Agreement on Trade in Services (GATS) in 1997. As a result of financial reforms, Egypt no longer limits foreign bank entry into the domestic banking market. Several foreign banks have majority shares in Egyptian banks, while other foreign banks are registered as branches of the parent bank rather than subsidiaries.[12]

Anecdotal evidence suggests that reasonable progress has been made in implementing financial-sector reforms in Egypt, and the sector has been experiencing a revival since the first stage of reforms in the 1990s. Financial consolidation appears to have brought about tremendous transformations in the Egyptian financial sector. For example, banking sector deposits recorded an increase from US$84.5 billion in 2004 to US$95.2 billion in 2005, US$104 billion in 2006, and US$118 billion in 2007 (see also Table 8 for detailed bank performance). The size of the banking sector, measured by total assets, fully reflects all positive developments on the economic, banking, and business climate fronts. There was remarkable growth of 23.2 percent year-on-year in 2007, outperforming its already high 12 percent average growth per annum over the previous five years, to reach a record high of LE 937.9 billion.[13] Specifically, the main banks in Egypt achieved high returns on average equity during 2005–07 (see Table 8). Also, most of the banks increased their total assets, which reflects the loan creation process of the banks. However, one or two state banks seem to have suffered some weak performance during the period (Table 8), but it is important to note that Egypt has not suffered a major banking or currency crisis during the reform period.

Since 2005, privatization has put about half of the banking sector into private hands and the government has restructured public banks, paying off non-performing loans owed by state enterprises while fostering the

Table 8: Performance indicators for the main banks in Egypt, 2005–07

Bank	Year	Total assets (US$ millions)	Equity (US$ millions)	Return on average equity	Deposit and short-term funding (US$ millions)
National Bank of Egypt	2007	37,425	1,259	4.37	32,850
	2006	32,175	1,193	4.57	27,941
	2005	27,707	1,135	4.89	24,667
Banque Misr SAE	2007	24,209	941	3.42	22,239
	2007	24,209	941	3.42	22,239
	2006	19,175	626	4.08	17,724
	2005	18,490	609	4.03	16,566
Banque du Caire SAE	2007	8,876	455	1.99	7,803
	2007	8,876	455	1.99	7,803
	2006	7,943	510	1.12	7,079
	2005	7,840	506	1.90	6,799
Commercial International Bank (Egypt)	2007	8,634	755	29.51	7,611
	2007	8,634	755	29.51	7,611
	2006	6,561	567	24.09	5,753
	2005	5,302	464	21.57	4,464
National Societe Generale Bank SAE	2007	8,590	642	20.19	7,427
	2007	8,590	642	20.19	7,427
	2006	6,914	445	5.93	6,010
	2005	2,913	231	43.77	2,563
Arab African International Bank	2007	8,015	386	39.47	7,424
	2007	8,015	386	39.47	7,424
	2006	4,918	259	31.77	4,543
	2005	3,312	207	27.60	3,011
Bank of Alexandria	2007	5,953	361	19.60	5,270
	2007	5,953	361	19.60	5,270
	2006	5,764	322	123.33	4,806
	2005	6,657	292	6.19	5,735
HSBC Bank Egypt SAE	2007	4,986	427	42.45	4,467
	2007	4,986	427	42.45	4,467
	2006	3,110	336	41.15	2,700
	2005	2,342	178	44.81	2,109
Arab International Bank	2007	4,200	534	9.02	3,634
	2007	4,200	534	9.02	3,634
	2006	3,833	497	4.54	3,297
	2005	3,654	487	6.84	3,141
Faisal Islamic Bank of Egypt	2007	4,004	122	0.00	3,684
	2007	4,004	122	0.00	3,684
	2006	3,372	119	17.40	3,075
	2005	2,864	119	15.32	2,591
Credit Agricole Egypt	2007	3,906	286	35.16	3,456
	2006	2,763	247	1.48	2,427
	2005	2,430	242	44.77	2,058
Barclays Bank - Egypt SAE.	2007	3,242	241	41.02	2,908
	2006	2,374	129	34.38	2,156
	2005	1,222	134	38.82	1,036
EFG -Hermes Holding Company	2007	2,439	1,715	15.97	596
	2006	1,630	1,404	16.21	282
	2005	420	154	43.03	247
Al Watany Bank of Egypt	2007	2,255	233	20.99	1,958
	2006	1,765	182	11.60	1,524
	2005	1,632	103	11.62	1,490
Housing and Development Bank	2007	1,932	137	26.52	891
	2006	1,599	109	21.29	859
	2005	1,638	72	15.81	1,039

(Cont'd.)

Table 8: Performance indicators for the main banks in Egypt, 2005–07 *(cont'd.)*

Bank	Year	Total assets (US$ millions)	Equity (US$ millions)	Return on average equity	Deposit and short-term funding (US$ millions)
National Bank for Development	2007	1,710	131	–62.83	1,532
	2006	1,537	55	–38.27	1,445
	2005	1,503	81	–0.13	1,342
Export Development Bank of Egypt	2007	1,544	152	0.99	1,033
	2006	1,276	113	–21.72	884
	2005	1,332	140	7.51	855
Société Arabe Internationale de Banque	2007	1,487	167	11.72	1,251
	2006	868	149	10.67	663
	2005	734	146	9.64	546
Bank Audi SAE	2007	1,474	197	–5.13	1,244
	2006	1,000	100	0.53	890
	2005	55	0	–199.9	49
MISR Iran Development Bank	2007	1,359	162	23.64	1,170
	2006	1,058	123	16.21	898
	2005	935	116	16.05	784
Arab Banking Corporation - Egypt	2007	1,101	111	7.06	854
	2006	444	100	6.20	328
	2005	405	94	7.50	297
Ahli United Bank (Egypt) SAE	2007	1,049	148	19.75	845
	2006	706	117	0.03	518
	2005	644	100	24.42	497
Egyptian Gulf Bank	2007	933	127	10.64	782
	2006	804	110	14.18	670
	2005	648	102	16.63	528
African Export-Import Bank	2007	812	346	11.43	442
	2006	623	293	11.35	312
	2005	587	264	8.97	305
Union National Bank - Egypt SAE	2007	571	114	38.87	436
	2006	332	–42	263.95	358
	2005	351	30	0.00	313

Source: Compiled by authors from BankScope.

resolution of private-sector non-performing loans. Complementary regulatory and judicial reforms such as setting up specialized economic courts, promoting out-of-court arbitrage, and enhancing the role of the private sector–led credit bureau is helping to improve contract enforcement and creditor protection, thereby addressing key obstacles to bank lending to small- and medium-sized enterprises (SMEs).[14] Also, recent reforms have enabled most banks to expand on their provision of non-traditional services such as brokerage services, investment consultations, asset valuation and sales, and mutual fund operations, all of which also helped to increase the volume of capital market services. Furthermore, improvements have been recorded in payment systems. Emphasis has been on upgrading and modernizing the institutional framework of the payments system at the Central Bank, including the introduction of a real time gross settlement system (RTGS) and the Automated Clearing House (ACH) to reduce the total processing time of checks issued by different banks.

Banking- and financial-sector reforms in Algeria

Against the background of South Africa, Nigeria, and Egypt, Algeria presents a special case. Before 1980, the country pursued inward strategies, which emphasized the key role of the state in the economy. The financial services sector was tightly regulated. Resource allocation was ensured via central credit allocation, preferential interest rates, and exchange controls. The banking system was segmented, with little competition and no foreign bank participation. Bond and equity markets were virtually nonexistent in Algeria in the early 1980s because of the predominant role of state ownership and the lack of a legal basis for capital market activity.

During 1986–96, Algeria began to introduce and implement banking-sector reforms. The main elements of the financial reforms in Algeria were fivefold. The initial steps involved raising interest rates in order to achieve positive real interest rates, and by 1990 deposit interest rates were fully liberalized. The ceilings on lending rates were lifted and limits on banking spreads were

Table 9: Performance indicators for the main banks in Algeria, 2005–07

Bank	Year	Total Assets (US$ millions)	Net loans to total assets (percent)	Equity (US$ millions)	Net income (US$ millions)	Return on average equity	Return on average assets	Deposits and short-term funding (US$ millions)
Banque d'Algérie	2005	61,607	2.42	1,014	n/a	n/a	n/a	40,722
Banque Extérieure d'Algérie	2005	13,968	21.95	464	17	3.71	0.13	12,005
	2006	20,940	14.86	566	87	16.7	0.49	18,253
	2007	31,861	12.96	1,183	n/a	n/a	n/a	28,940
Banque Nationale d'Algérie	2005	8,300	47.78	277	–40	–15.3	–0.47	6,249
	2006	10,076	49.28	351	61	19.26	0.66	7,879
Crédit Populaire d'Algérie	2005	5,844	31.51	450	37	8.52	0.64	4,990
	2006	6,857	28.22	653	111	19.87	1.72	5,731
Banque de Développement Local	2005	2,795	35.07	75	2	2.52	0.07	1,874
	2006	3,155	36.82	83	3	4.12	0.11	2,153
Banque Algérienne de Développement	2005	1,532	72.31	82	25	35.66	1.52	372
BNP Paribas El Djazaïr	2005	500	41.4	55	6	14.01	1.5	269
	2006	832	38.35	74	14	22.06	2.14	428
	2007	1,146	47.53	109	23	24.46	2.25	669
Société Générale Algérie	2005	520	46.17	43	7	20.16	1.69	375
	2006	909	52.39	50	9	18.69	1.23	665
Banque Al Baraka d'Algerie-Albaraka of Algeria	2005	564	66.23	46	9	21.29	1.64	299
	2006	646	64.65	68	15	25.09	2.36	388
	2007	842	67.02	90	20	24.4	2.59	667
Natixis Algerie	2005	256	24.97	38	4	14.04	1.86	194
	2006	518	51.26	59	3	5.31	0.67	311
Arab Banking Corporation—Algeria	2005	429	20.47	45	8	17.89	1.98	245
	2006	418	24.68	38	–9	–20.87	–2.06	242
Algeria Gulf Bank	2005	70	50.77	21	1	4.99	1.97	48
	2006	142	57.48	42	5	14.82	4.38	100
	2007	218	61.06	47	8	17.07	4.25	170
Banque du Maghreb Arabe pour l'Investissement et le Commerce	2005	195	9.51	68	2	2.96	1.08	125
	2006	210	4.3	73	3	4.68	1.63	135
Trust Bank Algeria	2005	107	44.18	22	4	26.45	5.26	67
	2006	172	59.02	46	0	1.15	0.28	102
Housing Bank for Trade and Finance —Algeria	2006	119	39.22	39	n/a	n/a	n/a	49

Source: Compiled by the authors from BankScope.

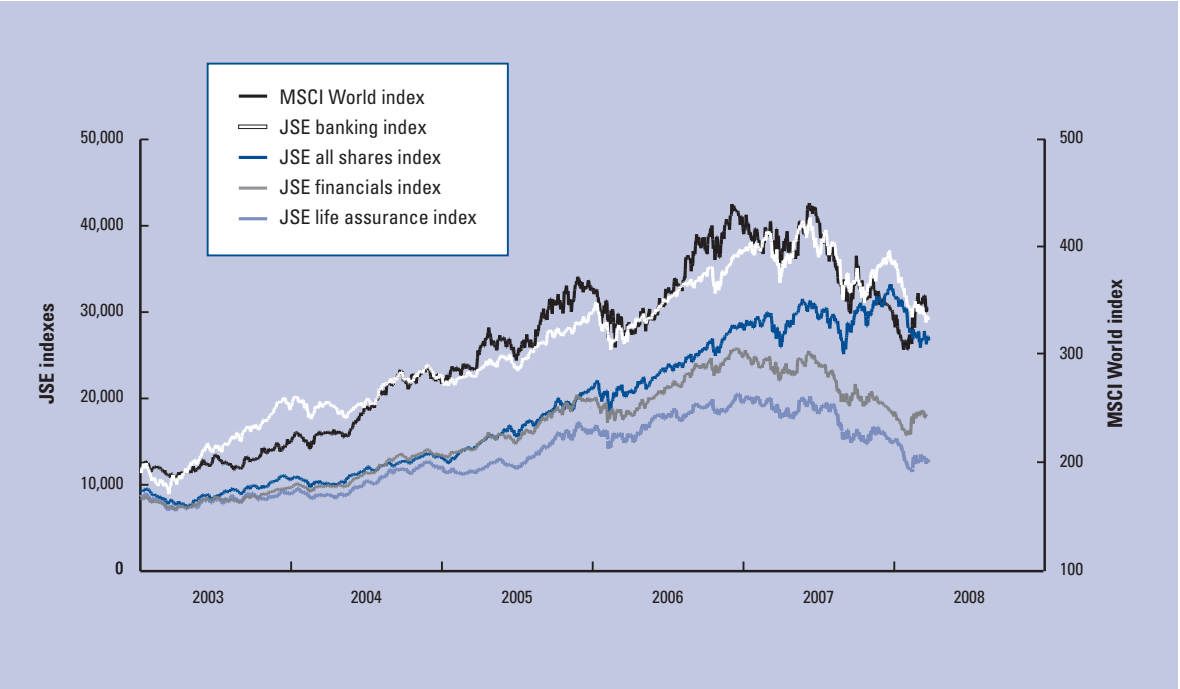
abolished in December 1995. The second element, initiated in 1987, relaxed the policy of directed credit. By 1994, banks were operating on the basis of market-based credit allocations to firms and households. The third element involved prudential regulation and banking supervision. New banking laws were introduced that emphasized the liberalization and deregulation of financial activities. By 1999, all banks were aiming to meet the risk-weighted capital-adequacy ratios recommended by the Basle committee. The fourth element was the enhancement of competition among banks. The key measures included opening the sector to foreign bank entry, allowing banks to pursue market-based lending decisions, and creating opportunities for many types of financial intermediaries. The fifth element was capital account liberalization. In April 1994, foreign exchange controls were removed and foreign investors were allowed to repatriate earnings.

It would appear that, by 2005, the positive outcomes of these banking-sector reforms were becoming visible. As shown in Table 9, the main banks in Algeria exhibited stable performance during 2005–07. In general, the banks achieved positive and reasonably high return on average equity as well as return on average assets.

Capital market reforms

Modern capital market reforms in South Africa started in 1995 with the Stock Exchange Control Act, which changed the way stocks were traded in South Africa. Foreign investors were allowed into the market. In 1997,

Figure 1: Daily movements of prices on the Johannesburg Stock Exchange, 2003–08



Source: South African Reserve Bank, 2008.
Note: Data show daily movements. MSCI World is an index of stocks of all the developed markets in the world, published by MSCI Inc., formerly Morgan Stanley Capital International.

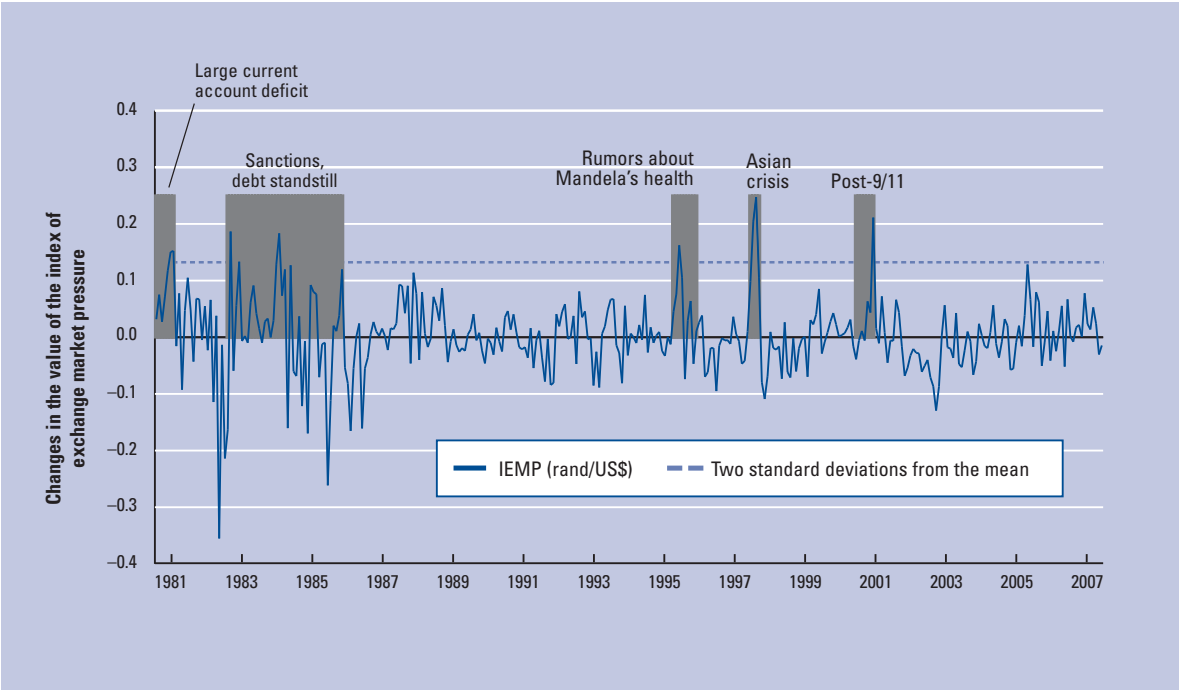
the bond market was separated from the Johannesburg Stock Exchange (JSE) to become the Bond Exchange of South Africa and was licensed as a financial market under the terms of the Financial Market Control Act. Also in 1997, an electronic screen trading system replaced the traditional open floor outcry system. In 2001, new capital adequacy requirements were introduced; this had major financial implications for brokerage firms. In July 2005, the JSE was demutualized after 118 years of existence as a mutual entity. In 2007, the pre-approval process for FDI for transactions of less than R 50 million per company per annum was removed. Also in 2007, the rand currency futures market was launched, enabling qualifying South African investors to participate directly in the currency market through a transparent and regulated domestic channel. Further, in 2007, the restrictions on South African companies and other entities to participate in foreign inward-listed securities on the JSE and the Bond Exchange of South Africa (BESA), including participation in the rand futures market, were removed.[15]

As shown in Figure 1, the five main stock market indexes on the JSE moved upward continuously from 2003 to the end of 2007. The JSE is growing rapidly, with market capitalization of 290 percent of GDP, up from 154 percent in 2004. The JSE was ranked the 17th largest exchange in the world and the 4th largest emerging market target for investments, collecting US$9.4 billion in 2005, up from US$1.5 billion a decade before. The fall in the indexes at the start of 2008 seems to pick up the initial stages of the global financial crisis.

Figure 2 shows the movements in the index of exchange market pressure during the reform period 1981–2007. Three exchange market pressure points are indicated after 1995. The first arises from rumors about Mr Mandela's health in 1996, reflecting the market's efficient response to news. However, the market quickly recovered. The second pressure point connects to the Asian financial crisis that broke out in November 1997, causing a blip in the market in 1998. The third was the post-9/11 shock. The main implication of the market's response to these pressure points is that the JSE is efficient and reacts quickly to new information, including the ongoing global financial crisis.

As mentioned before, in contrast to South Africa, the capital market reforms in Nigeria revolve around the big bang in the banking sector. Although the capital market reforms in Nigeria started with the enactment of the Investment and Securities Act (ISA) in 1999, further reforms were introduced in 2006, in which the main component was the recapitalization of capital market operators. The new capital base for issuing houses was set at ₦2 billion, for underwriters it was set at ₦2 billion, for brokers and dealers at ₦1 billion, for corporate sub-brokers at ₦50 billion, for clearing and settlement agencies at ₦10 billion, for fund and portfolio managers at ₦500 million, and for registrars at ₦500

Figure 2: Index of exchange market pressure, 1981–2007



Source: South African Reserve Bank, 2008.
Note: The index of exchange market pressure (IEMP) is the index of exchange market power of the South African rand to the US dollar. It is calculated as a weighted average of the depreciation of the rand, the percentage change in international reserves and the change in domestic interest rates. A rise in the value of the index indicates increasing pressure in the rand and vice versa. Gray bars indicate distressed episodes.

million. The reforms included a review and reduction of transaction costs to make the market internationally competitive and investor friendly. Companies were also given concessions to enable them raise new funds and to facilitate mergers and acquisitions or other forms of restructuring. In addition, market makers were introduced to create a vibrant and liquid market. Corporate governance codes were introduced to minimize the incidence of insider trading in companies' shares. The bond market was reactivated and the commodity market was developed to provide mechanisms for mitigating risk in agricultural production and marketing.

In Egypt, the capital markets in Cairo and Alexandria are among the oldest in Africa. However, the new reforms started with the introduction of the Capital Markets Law 95 of 1992, which removed restrictions on foreign investment and introduced changes into primary and secondary markets, and the re-opening of the Cairo and Alexandria Stock Exchange (CASE) in 1993. Also, the law empowered the Capital Market Authority (CMA) to work as an independent supervisor of the stock exchange. The other main elements of the reforms include establishing the Investor Protection Fund (IPF); modernizing the CMA and establishing a corporate governance department; issuing codes of ethics and conduct for brokerage and fund management activities; introducing intra-day trading, in which the settlement for selected stocks would be executed immediately on selected stocks instead of after 2–3 days for other stocks; and establishing an electronic link between the stock exchange and the clearing house.[16]

Because of capital market liberalization, foreign investors have full access to capital markets in Egypt. The law allows for the establishment of Egyptian and foreign companies that provide underwriting, brokerage services, securities and fund management, and venture capital. In addition, Egypt's commitment to GATS provides for unrestricted market access and national treatment for foreign companies. International investors are permitted to operate in the Egyptian market largely without restriction. Several foreign brokers, including US and European firms, have established or purchased stakes in brokerage companies.

CASE was one of the best performers in North Africa in 2007. The CASE 30 index grew by 51 percent year-on-year, from 6,973.41 at the end of 2006 to 10,549.74 at the end of 2007, and nearly quadrupled during 2006–08. The bond markets also witnessed significant growth in 2007, with a total trading value rising from LE 11 billion in 2006 to LE 24 billion in 2007.[17] Market capitalization in particular has been on the rise in recent years, increasing as a percentage of GDP in 2007 to reach 105 percent, up from 29 percent in 2002 (see Table 10). Foreign investor participation in the market has also improved noticeably, from a daily average of 16 percent in 2001 to 35 percent in 2005. In 2006, the

Egyptian market witnessed a more active trading activity than it had seen in 2004 and 2005—the total number of transactions for the period of January–April reached 2.2 million and the average monthly value traded reached LE 29,480 million. Market activity in recent years has been advanced significantly by privatizations, initial public offerings (IPOs), and new listings that began with Raya Holding and continued with Alexandria Mineral Oil, Sidi Krir Petrochemicals, and Telecom Egypt. Turnover ratios have more than quadrupled since 2002, and the investor base has expanded significantly, with foreign investors increasing their equity holdings from 7 percent to 10 percent of GDP.

Compared with other SANE economies, capital market reforms in Algeria have been quite limited. The capital market there is still underdeveloped and mainly comprises the bond market, which includes government bonds as well as company bonds issued by state-owned enterprises. During 1986–96, new instruments and markets were developed, particularly as a result of the move to a more market-based financing of the government sector. Since 2003, only 30 debt securities have been issued, totaling about US$2.1 billion.

Nevertheless, it should be noted that the development of the local capital market in Algeria has yielded a number of benefits. These include giving banks more time to upgrade their credit practices and risk management, reducing the exposure of the banking system to public enterprises, and spurring banks to develop new sources of income through competition with capital markets. These sources include bringing large issuers to the market, managing mutual funds, and developing SME loans.

Reforms of the insurance services sector

The main reforms of the insurance services sector in South Africa started with the introduction of industry codes of business conduct and ombudsmen procedures to address consumer complaints, in 1985 for life insurance and in 1989 for short-term insurance. Thereafter, there were four milestones for the reform of the sector. First, in 1998, short-term insurers were required by the Financial Stability Board to have an initial capital of R 5 million, while the equivalent for long-term insurers was set at R 10 million. Second, in 2001, the Friendly Societies Act was passed to allow societies to guarantee benefits for the insured. Third, in 2007, underwritten policies of long-term insurers increased their foreign exposure from 15 to 20 percent. Measures to ensure the safety and efficiency of the national payment system were also introduced. SARB issued directives regulating conduct in the payment system for system operators and third-party service providers. Fourth, in 2008, the terms and conditions of insurance instruments were modified.[18]

Table 11 shows that South Africa has the highest insurance penetration rates in 2006, with premiums accounting for 16 percent of GDP as compared to 8 percent of GDP in the United States.[19] The sector was expanding during the reform period in 2005–07, as shown by the key indicators.

In contrast to South Africa, the main element of the insurance-sector reforms in Nigeria was an increase in the minimum paid-up capital of insurance and reinsurance companies. The new recapitalization of insurance and reinsurance companies took effect from September 1, 2005, for new companies and February 28, 2007, for existing companies. The new capital base was set at ₦2 billion for life insurance business, ₦3 billion for general insurance business, and ₦10 billion for reinsurance.

In Nigeria, the capitalization of insurance firms has enabled these firms to expand the range of investment-related products offered to policy holders. In addition, these firms have been able to increase their operations, strategic business acquisitions, and supervision. The magnitude of these changes are reflected by two indicators: insurance market capitalization increased from ₦25.9 million in 2006 to ₦206 million in 2007, while insurance premium income increased from ₦82 million in 2006 to ₦117 million in 2007, according to the Nigerian Insurance Association in 2008.

In Egypt, the insurance market was closed to foreign companies until May 1995. New legislation in 1998 removed the 49 percent cap on foreign holdings for domestic insurers, abolished the nationality stipulation for executive management, and allowed the privatization of public-sector insurers. Some recent liberalization of the sector has led to the entry of several major foreign insurance intermediaries. The follow-up on the Financial Sector Assessment Program carried out by the World Bank in 2007 introduced new reforms to strengthen the insurance industry, including the establishment of the Egyptian Insurance Supervisory Authority (EISA).

Table 12 confirms the improvement in the insurance sector that resulted from an increase in services in the life and non-life insurance sectors as well as the increase in premiums from June 2006 to June 2008. However, the Egyptian insurance market remains small and underdeveloped because of excessive stamp duties and premium taxes, among other factors.

In Algeria, insurance-sector reforms involved three types of insurance activity: direct insurance, specialized insurance, and international reinsurance. The reforms allowed insurance companies to distribute their products through commercialization via the banks. In 1995, the government instituted a formal auction system through which insurance companies are able to sell and buy treasury bonds.

Potential positive spillover effects of financial-sector reforms

Recent studies suggest that financial-sector reforms tend to create spillover effects to the rest of the economy,[20] so it is interesting to explore the developments that may be attributed to the reform process in each of the SANE

Table 10: Basic capital market indicators for Egypt, 2002–07

Indicator	2002	2003	2004	2005	2006	2007
Number of listed companies	1151	978	795	744	595	435
Market capitalization (% of GDP)	29	35	43	74	80	105
Turnover ratio (%)	9.5	11.5	14.2	31.1	48.7	38.7
Tradable government debt (% of total)	19	20	23.3	25.6	36.1	n/a

Source: Capital Market Authority, 2008.

Table 11: Selected performance indicators in the insurance sector in South Africa, 2005–07

Indicator	2005	2006	2007[4]	2007
Individual lapses[1]	27	38	36	44
Individual surrender[1]	18	22	13	16
Number of policies (yearly change)	7	4	7	7
Share prices (yearly change)[2]	15	26.3	30.3	7.8
Claims to net premiums	103	94	100	101
Management expenses to net premiums	8	8	9	11
Commission to net premiums	8	6	6	6
Underwriting profitability[3]	–18	–8	–15	–18
Conventional profitability[5]	3.9	11.7	12.3	n/a

Source: Research and Markets, 2008.
Note: Data refer to 12 months ended December 31, unless otherwise indicated.
1 Expressed as a percentage of the number of new policies issued during the period using statistics that were not audited.
2 *Share prices* represent share price movement for life insurers.
3 Net premium incomes less net premium expenditure all divided by net premium income. *Underwriting profitability* refers to underwriting profit, measured by the difference in earning in underwriting and in the investment of assets and other sources.
4 2007 data are for the six months ended June 30.
5 *Conventional profitability* is profit over total revenue. Profit is measured by revenue minus expenditure.

Table 12: Structure of insurance sector in Egypt, June 2006–June 2008 (Egyptian pounds)

	JUNE 2006 End of Phase 1			JUNE 2007 Start of Phase II			JUNE 2008 End of Phase II		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Premium	3,102	1,635	4,738	3,256	2,600	5,857	3,405	3,348	6,752
Life	929	858	1,788	982	1,431	2,413	1,014	1,882	2,896
Non life	2,173	777	2,950	2,274	1,169	3,443	2,391	1,465	3,857
Investments	—	—	18,695	—	—	21,256	—	—	24,870

Source: Egyptian Insurance Supervisory Authority, 2008.

economies. For example, the recent financial-sector reforms in South Africa and Nigeria seem to have coincided with growth in microfinance financial services, especially in support of SMEs; in Egypt there seems to be a closer link between the reforms and the increase in SME financing.

The microfinance industry in South Africa is used to support the private-sector strategy on SME development as well as the national poverty reduction strategy. The 1992 Exemption to the Usury Act of 1968 exempted small loans from interest rate restrictions. As a result, micro lending increased rapidly because of pent up excess demand—disbursements reached nearly R 15 billion in 1999 and R 30.03 billion in 2006. This is consistent with a broader trend in the South African banking industry toward the financing of small firms. This exemption essentially licensed micro-lenders to create a separate, largely unregulated, tier of credit for people on the fringes of the banking system.

Soon after South Africa's first democratic elections, the new government created development finance institutions in 1995–96: the National Housing Finance Council (NHFC) and Khula Enterprise Finance (Khula). However, Khula was not successful; in 2006, it was replaced by the South African Microfinance Apex Fund (SAMAF). By 1999, the government realized that the 1992 exemption created an environment conducive to high interest rates and abusive practices. The Micro

Table 13: Distribution of financial services for SMEs in Nigeria, 2008

Sector	Projects (number)	Projects (percent)	Amount invested (naira millions)
REAL SECTOR			
Agro allied	45	13.76	2,295
Manufacturing	140	42.81	7,712
Construction	13	3.98	2,786
Solid minerals	3	0.92	59
SERVICE RELATED			
Information technology and telecommunications	23	7.03	1,788
Educational	6	1.83	397
Services	74	22.63	4,663
Tourism and leisure	23	7.03	5,054
TOTAL	**327**	**100**	**24,747**

Source: Central Bank of Nigeria, 2008.

Finance Regulatory Council (MFRC) was established under the 1999 Usury Act Exemption Notice as part of the process of financial-sector liberalization. In 2002, it became compulsory for all suppliers of microfinance to register with the National Loans Register (NLR), a database that records all loans disbursed by lenders registered with the MFRC. In 2004, Mzansi bank accounts were introduced to encourage blacks in tribal and urban areas to have formal bank access; these accounts are issued by Absa Group Limited, Standard Bank, the South African Post Bank, the First National Bank, and Nedbank. In 2006, of the 3.3 million active Mzansi account holders, 91.3 percent were first-time bank users; 62 percent were between 25 and 54 years old, and 50 percent were women. The growth rate of the accounts rose over the years, increasing from 2 percent in 2005 to 6 percent in 2006 and 10 percent in 2007.

At the same time, the Small Enterprise Foundation (SEF) was created in 1992 to provide tiny loans to the very poor, unemployed people of rural Limpopo. The organization follows a solidarity group lending methodology very similar to that pioneered by the Grameen Bank of Bangladesh and operates through two streams. SEF has disbursed 42,820 loans for self-employment, for the total value of R 532 million as of December 2007. SEF's recovery performance has been exceptional, with bad debts as of December 2007 standing at 0.2 percent. The SEF program has also created employment, and there has been steady growth from 105 staff in 2002 to 205 in 2007.

In Nigeria, microfinance and SME activities during the period 2005–08 largely reflected the rapid transformation of the financial services industry. The Small and Medium Enterprises Equity Investment scheme was introduced in 2005 as a voluntary initiative in response to the federal government's concerns and policy measures for the promotion of SMEs as vehicles for rapid industrialization, sustainable economic development, poverty alleviation, and employment generation. The scheme requires all banks in Nigeria to annually set aside 10 percent of their profit after tax for equity investment in eligible SMEs or loans at single-digit interest rates in order to reduce the burden of interest and other financial charges under normal bank lending. The banks are also required to provide financial, advisory, technical, and managerial support to eligible SMEs.

Table 13 reports the status of the scheme as of May 2008. It would appear that the financial reforms may have enabled the microfinance sector to make financial services available to SMEs. Reforms in microfinance policy and the regulatory and supervisory framework may have helped community banks to convert to MFBs and increase their capital base. Universal banks and non-government organizations (NGOs) were able to establish MFBs based on group membership. By the end of 2008, 603 community banks were converted to MFBs while 76 new applications for fresh licenses were received. In order to sustain the microfinance framework, various processes were put in place, such as the establishment of the National Microfinance Consultative Committee, the MFB Development Fund, the Association for Microfinance Institutions, a credit reference bureau, rating agencies, and deposit insurance schemes.

Further, in Nigeria, there is evidence of positive spillover effects from the financial services sector to the rest of the economy in terms of the increase in employment across the seven largest banks because of the high number of new branch openings across states, as shown in Table 14.

The Egyptian experience directly links financial-sector reforms to microfinance provision and SME financing. Public and private banks provide microfinance loans to SMEs under the overall regulation of the central bank.

Table 14: Number of employees in the seven biggest banks in Nigeria

Bank	2006	2007	2008
Access Bank	484	729	n/a
United Bank for Africa	4,568	4,634	n/a
Intercontinental Bank	n/a	6,895	9,212
Union Bank of Nigeria	6,931	7,276	n/a
Diamond Bank	1,631	2,283	n/a
Zenith Bank	3,911	5,435	7,628
First Bank of Nigeria	7,132	7,593	8,810

Source: Financial statement reports of individual banks.

Financial-sector reforms in Egypt may have also generated positive spillover effects to the rest of the economy. Comprehensive financial reform packages have put the Egyptian economy into a very strong position with good growth prospects offering excellent opportunities for both foreign and domestic investment. For example, currency conversion has enabled Egypt to enjoy exchange rate stability since 1991, along with positive real interest rates, both of which encouraged significant capital flows. Specifically, there was an increase in FDI from 2003–04 at US$ 2.1 billion to 2004–05 at US$3.9 billion, 2005–06 at US$6.1 billion, and 2006–07 at US$11.1 billion. In addition, structural reforms have continued to promote a dynamic private sector–driven economy. The privatization of several public enterprises, including public banks and joint ventures, and unused land has helped to strengthen the role of the private sector.

In Algeria, financial-sector reforms also appear to have generated some positive spillover effects from the financial services sector to the rest of the economy. Algeria conducted a Financial Sector Assessment Program update with a joint International Monetary Fund (IMF) and World Bank team. It was found that the banking system does not pose a threat to macroeconomic stability because of the financial resources of the predominant owner of banks—the government that has repeatedly bought back non-performing loans from public banks to public enterprises. It was also found that some progress has been made in banking supervision, in the operational environment for financial intermediation, and in the governance framework of public banks. Algeria has made progress toward both global and regional economic integration. The country has undertaken increasingly market-based and outward-oriented policies. Also the country's financial reforms appear to have generated some other benefits, such as strengthening its monetary policy transmission mechanism. The authorities have implemented the recommendations of the 2007 Financial Sector Assessment Program update, and improved bank governance and credit risk management.[21]

Toward a measurement of financial-sector competitiveness in Africa

Measuring performance is important for many aspects of the business sector and, as we have shown in the previous sections of this chapter, some traditional yardsticks —such as return on equity and return on assets—may be used to measure bank performance, or specifically bank profitability, in order to monitor progress of financial reforms over time in the SANE economies. In this section, we seek to go beyond traditional measures of bank performance—we propose and demonstrate two main yardsticks for measuring bank competitiveness in Africa.

Rationale for measuring competitive conditions in the banking sector

Most banks in Africa are engaged in the retail banking business; they deal with the general public (households) and businesses by taking in deposits and giving out loans. These banks require standard inputs such as deposits, workers (labor), and capital equipment (such as computers) in order to produce standard banking products such as consumer loans, mortgages, and overdrafts. The bank inputs are obtained at a given price, such as deposit rates, and the bank products are sold at a given price, such as consumer loan rates. However, the prices for inputs and outputs are driven by how many banks are competing in the market place and whether the banks tend to act collaboratively by colluding to fix the prices of inputs and outputs, or the prices may be driven by whether the banks compete in cut-throat fashion against each other.

The fundamental idea is to measure the degree of competitive conditions in the banking sector in terms of whether individual banks (as participants in the banking market place) are able to charge a higher price above the marginal cost of producing bank products (such as overdrafts and loans). An extreme case occurs in a country where very few large banks have monopoly power—they may be able to charge high prices and make huge profits because there is no competition. In another extreme case, if banks enjoy free entry and exit in the market place, competitive conditions may be so intense that no single bank can influence prices of inputs and

outputs. For example, it is useful to note that banks in Africa have gone through three phases.[22] In the first phase, characterized by the pre-independence era, most big banks were branches of the colonial banks in Europe and primarily served the multinational businesses and the colonial government or employees in these establishments; they did not serve local businesses or households. The second phase, in the 1970s, was characterized by nationalization and thus the predominance of state-owned banks. What was common in the first and second phases was the absence of competition either because very few large banks colluded to fix prices or simply because the prices of bank inputs and bank outputs were determined by national authorities. The third phase started in the 1980s and ushered in entry of foreign banks, which—gradually during the last two decades—has opened the domestic banking sectors to international competition and effectively has tended to break down national monopolies in the domestic banking sector in many African countries.

What is appealing about these yardsticks is that not only are they derived from rigorous empirical research and thus have a rather scientific basis, but they also have great potential applications and could be routinely monitored by bank managers, bank regulators, or even the business community in a way similar to the way inflation rates and growth rates are monitored today. The estimation methods we employ allow us to generate empirical parameters that can be used to evaluate the deviation between prices and marginal costs in the banking sector at a particular point in time, say annually. For example, the metrics may be used to infer the unobserved competitive conduct of bank management in the market place at different points in time, and whether bank managers are exploiting a lower degree of competition in the banking market in order to charge higher prices and make profits. Bank regulators may use the metrics to monitor and uphold competitive conditions in the banking market by, for example, minimizing the possibility of collusion and anti-competition tendencies among banks. Bank regulators are concerned with providing a level playing field for bankers as well as the public and with ensuring that the rules of the trade for financial services are strictly followed.

We thus propose to generate and report two main metrics of competitive conditions in the banking sector in South Africa, Algeria, Nigeria, and Egypt. For each country, we generate each of the two measures for each year within the period 1992–2008, in order to capture the period before and after the financial reforms in each of the large African economies. In the literature, these two metrics are referred to as the *H* or *competitive environment measure;* and the *theta measure* or the *industry average of bank competition,* which takes into account the interdependence among the banks. Both of these measures are based on bank-level data and they should yield the same signal or conclusion; they differ only in some degree of detail. We highlight each measure below; the technical details are discussed in the appendix.[23]

The *H* or competitive environment measure

The idea of the *H* or competitive environment measure is to offer insight into the competitive conditions under which banks operate and specifically earn their gross revenue. Using bank-level data, we measure the extent to which various inputs (such as deposits and employees) and input prices (such as deposit interest rates and wages and salaries) determine the gross revenue earned by the bank each year. We also take into consideration some general factors, such as the degree of bank regulation, which may affect bank revenue.[24]

To explore the full range of the value of *H*, let us take an example of an extreme case where the environment in the banking market is dominated by very few large banks that have a monopoly position and the central bank or bank regulator is very passive. Under these conditions, the banks are able to mark up the interest rate on loans by any increase of input prices—that is, they try to pass on any increase in input costs to the bank customers. We assume there is no free entry and exit of foreign banks into the domestic banking market, so there is no competition from international banks. The profit-maximizing monopoly bank sets output price so that it operates at an output level where the perceived marginal revenue equals marginal cost. But high loan rates or, in general, high prices for bank products will tend to reduce the number of customers who are able and willing to take on bank loans—that is, with the attempt of the monopoly to pass the higher marginal cost on to consumers by increasing the output price, the gross revenue must decrease. The *H* measure summarizes the extent to which an increase in the input prices affects the gross revenue of the bank (the elasticity of gross revenue to input prices). In this case, it is negative in the sense that, as the prices of bank inputs increase, the gross revenue of the bank decreases. In other words, the *H* measure is negative ($H \leq 0$) when some banks play a monopoly role in the market or a few banks form a perfectly collusive cartel in order to control the production and pricing of banking services (i.e. what banking services to offer to clients and at what price).

To explore the other extreme case of the *H* measure, we consider the environment of free bank entry and exit such that, in the long run, there is perfect competition among the banks and no single bank can fix the price of inputs and outputs. Competition among the banks is such that rival banks watch each other; 1 percentage increase of input prices induces 1 percentage increase of average cost. Each bank is a price taker, such that if the bank incurs a loss even at its profit-maximizing level, it would just leave the market (there is free entry and exit). When some banks leave the market, output prices increase, attracting new banks to enter. Competitive exit and entry adjust the level of the output price

until the surviving firms face a demand price adequate to cover the new higher average cost. Free entry and exit means that no individual bank can manipulate the price of loans or any bank output. Hence, when the banking market settles down into a new long-run equilibrium, the total revenue of surviving banks increases by the same percentage as the average cost, which increases by the same percentage as input prices; that is $H = 1$ in this environment, with interdependence among banks and free entry and exit. Again, this is an ideal scenario.

Between these two extremes of a monopolist or cartel of banks ($H \leq 0$) and perfect competition ($H = 1$) lies the scenario in which most banks in Africa will tend to fall. Importantly, banks emerging from the second phase into the third phase in Africa (as discussed above) should be moving from negative H value toward $H = 1$. The argument here is that the value of the H measure is between zero and one ($0 < H < 1$) for a bank operating under monopolistic competition in long-run stable conditions (i.e., equilibrium). *Monopolistic competition* is different from *monopoly* in the sense that the perceived demand curve facing the individual bank under monopolistic competition depends upon the prices (quantities) of the substitute products in the market. Rival banks exist; there is also the entry or exit of additional products in response to profits or losses. Hence, each bank's revenues increase less than proportionally to a change in input prices; in other words, ($0 < H < 1$).

The theta measure or the industry average of bank competition

This measure tries to capture more information than the H metric in two senses. First, it represents the industry average of bank competition such that it is possible to rank each bank below or above average; that is, if bank shareholders, managers, or central bankers take the industry average as the threshold, then each bank should be as competitive as the industry average. Second, the empirical measures used to generate the theta metric are more rigorous and reliable than those for the H measure. The measure is derived from three basic ingredients: the behavior of banks in terms of how they set prices of inputs and outputs, the behavior of banks in terms of how they manage costs, and the interdependence among the banks (the degree of collusion).

In general, in the theta measure, the range of possible values of theta is given by [0, 1]. In the case of perfect competition, each bank is always looking for profit opportunities; when one bank makes a strategic move to offer financial services (e.g., life insurance), the rest of the banks in the industry may move strategically in the opposite direction by moving out of insurance services provision altogether. In this example, because the degree of interdependence of one bank to the rest of the industry is –1, and theta_{it} = this degree of interdependence + 1, then $\text{theta}_{it} = 0$, when it = bank i at time t. This means that there is no deviation from equilibrium because each bank is as competitive as the industry average of bank competition. Under pure monopoly, $\text{theta}_{it} = 1$ because the degree of interdependence of one bank to the rest of the industry is 0. And, finally, $\text{theta}_{it} < 0$ implies pricing below marginal cost and could result, for example, from a non-optimizing behavior of banks. The presence of such non-optimizing behavior is termed *super competition*.[25] In addition, competition can be described in terms of the market share of each bank relative to the industry; for example, if one large bank has 80 percent of the total assets of the banking sector in the country, it has considerable market power. In this special case, also known as Cournot competition, theta_{it} is simply the market share of each bank. The technical discussion is given in Appendix Table A3.

It is to be noted that the degree of competition in the market place is captured from the estimated interdependence among market participants, which denotes the bank's belief about the rivals' response to changes in its own decision. As a result, the estimated results have very clear economic meanings. Moreover, the estimated results on the demand, cost, and equilibrium characteristics underlying the market along with the estimation of the competitive conduct could provide insight into the sources for the estimated competitive conduct. In addition, the theta measure does not require that all banks in each of the SANE countries have the same theta parameter. If the bank market in each country is composed of some dominant bank (or cartel) plus a competitive fringe, the estimates of theta would represent a weighted average of the perfectly competitive and collusive values, and would thus be larger than the perfectly competitive value. If the sample consists of several time periods, the theta measure would reflect an average value over some number of periods. If the market is characterized by perfectly competitive behavior in some years and changes into imperfectly competitive behavior in other years, the estimates of theta would exceed the perfectly competitive average.

How competitive are the banking sectors in the SANE economies?

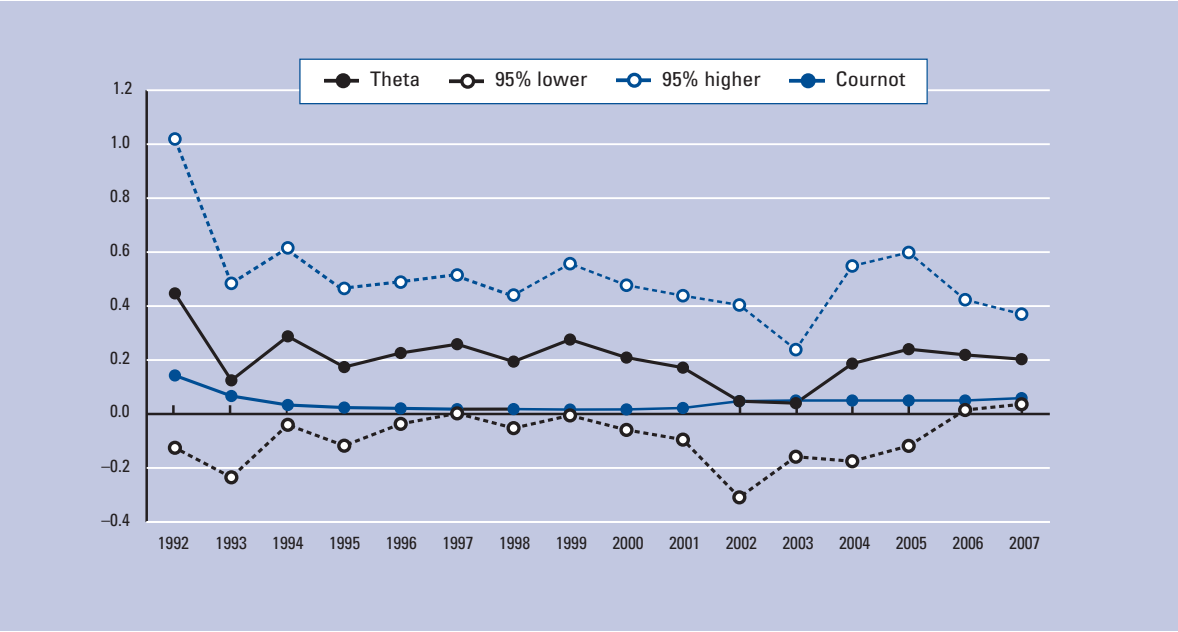
Each of the SANE economies presents its own challenges in assessing the competitiveness of its banking sector. The following sections review evidence of each of these economies.

Evidence for South Africa

The evidence for South Africa for the H measure and the theta measure is reported in Figures 3 through 5; see Appendix Table A4 for the numerical values.

Figure 3 depicts annual estimates of the theta measure, the industry average of competition in the South African banking market for the period 1992–2007, and their 95 percent confidence intervals. As shown, over the

Figure 3: The industry average of bank competition in South Africa, 1992–2007



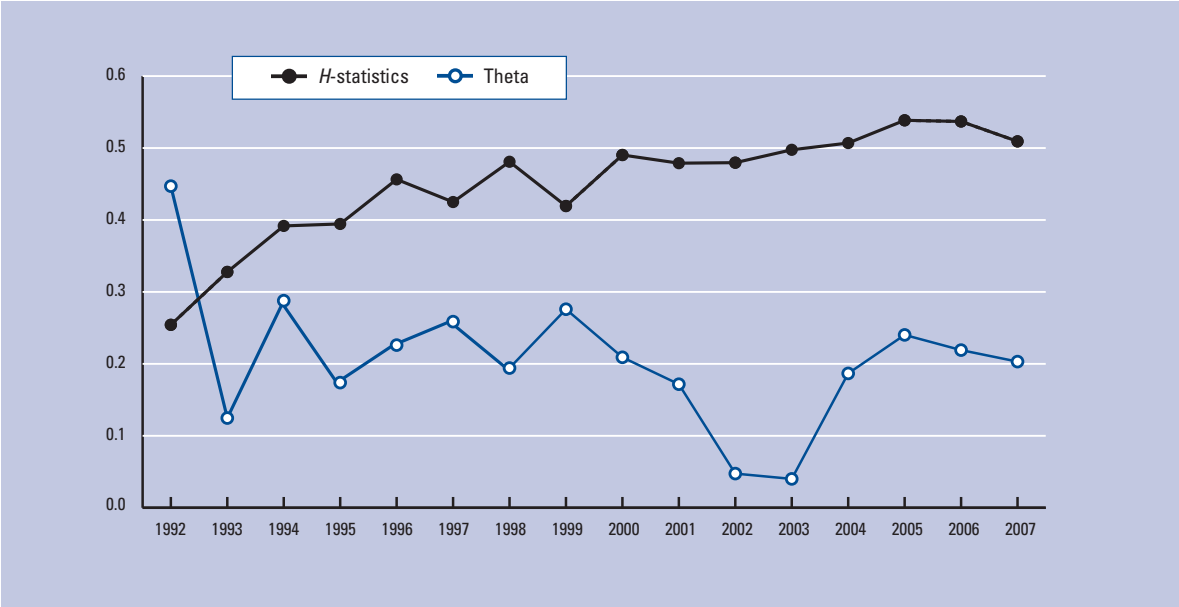
Authors' calculations.
Note: Theta measures the point estimate of the average degree of competition in the banking industry; it ranges between 0 (perfect competition) and 1 (monopoly). To be plausible, the theta measure is interpreted with respect to three benchmarks: (1) the upper 95 percent confidence interval; (2) the lower 95 percent confidence interval; and (3) the Cournot value, which represents the average market share of one bank in the industry. So the values of theta must fall within these three benchmarks.

sample period, except for the first year 1992, the results rejects theta = 1 or pure monopoly conditions. Moreover, the Cournot benchmark lies within the 95 percent confidence interval of thetas. As a result, the overall competitiveness condition in the bank loan market in South African commercial banking appears to be more competitive than what would obtain under Cournot oligopoly conditions. Furthermore, except for 1997, 1999, and 2007, the results for other sample periods fail to reject the equality theta = 0 perfect competition conditions, and the lower confidence band suggests the possibility of the presence of super competition. The movement pattern of the point estimates of thetas, despite several temporary setbacks, shows a downward trend and registers a sustainable decrease for the period 1999–2003. Thereafter, it rises in 2004 and 2005, and declines again in 2006 and 2007. In summary, competition in the country seems to be intensified until 2003. The short-term fluctuation of thetas before 1999 and the rebound of thetas after 2003 would result from the presence of super competition. Hence, the South African banking market has been characterized by fairly intense competition during the reform period.

Figure 4 gives the results derived from *H*-statistics and the comparison between the conjectural variations parameters and the *H*-statistics for South African banks; see also the numerical values in Appendix Table A4. The limitations of *H*-statistics mean that caution should be used when viewing the results. First, these limitations require the long-run equilibrium for identifying perfect and monopolistic competition. In the case of South African banks, our test for the presence of the long-run equilibrium indicates that only half of our sample period satisfies this requirement. Second, the economic interpretation of the magnitude of the derived *H*-statistic (apart from the long-run competitive equilibrium value of 1) is ambiguous. This is because the *H*-statistic does not map directly into any static or dynamic oligopoly equilibrium concept. Overall, for the periods that passed the test for long-run equilibrium, the evidence suggests that the South African banking market is generally characterized by monopolistic competition. Furthermore, the change in *H*-statistics in 10 out of 16 data points appears to be opposite to that of thetas, which gives a picture that is roughly similar to the change in the degree of competition of thetas.

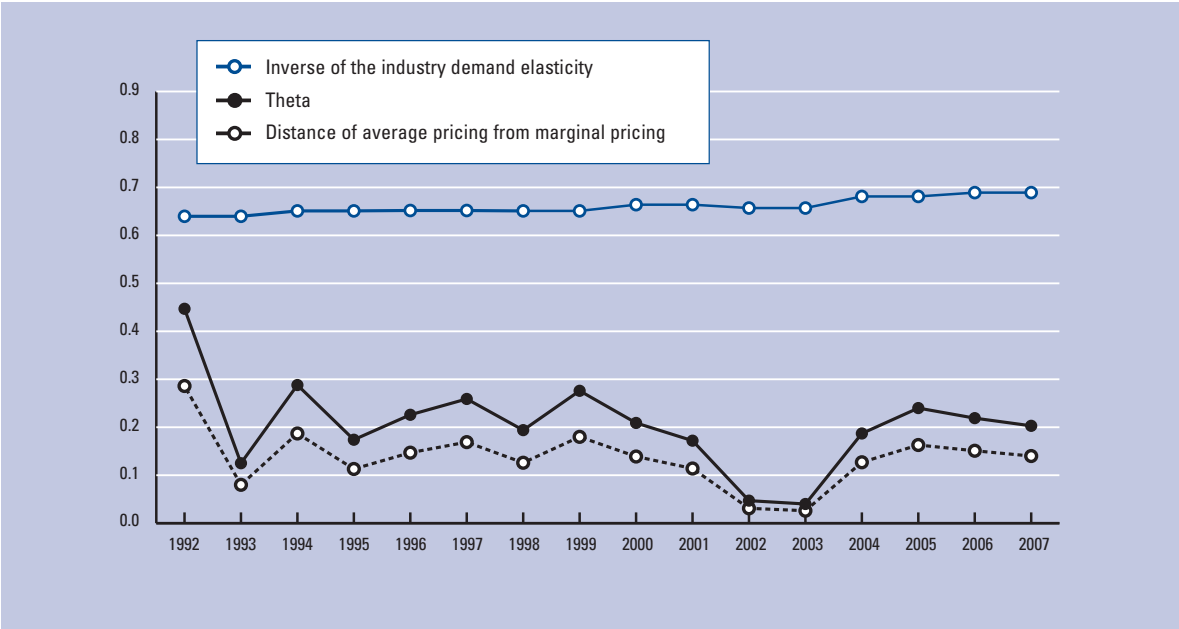
Figure 5 shows that the industry demand elasticity for commercial banking in South Africa slightly decreased during the period 1992–2006. This evidence is consistent with the observations made in the second section of this chapter, that commercial banks in South Africa were increasingly facing competition from the growth of other providers in the financial services sector—for example, the capital market, cooperative banks, and microfinance credit markets.

Figure 4: Theta parameters and the *H*-statistics for South Africa



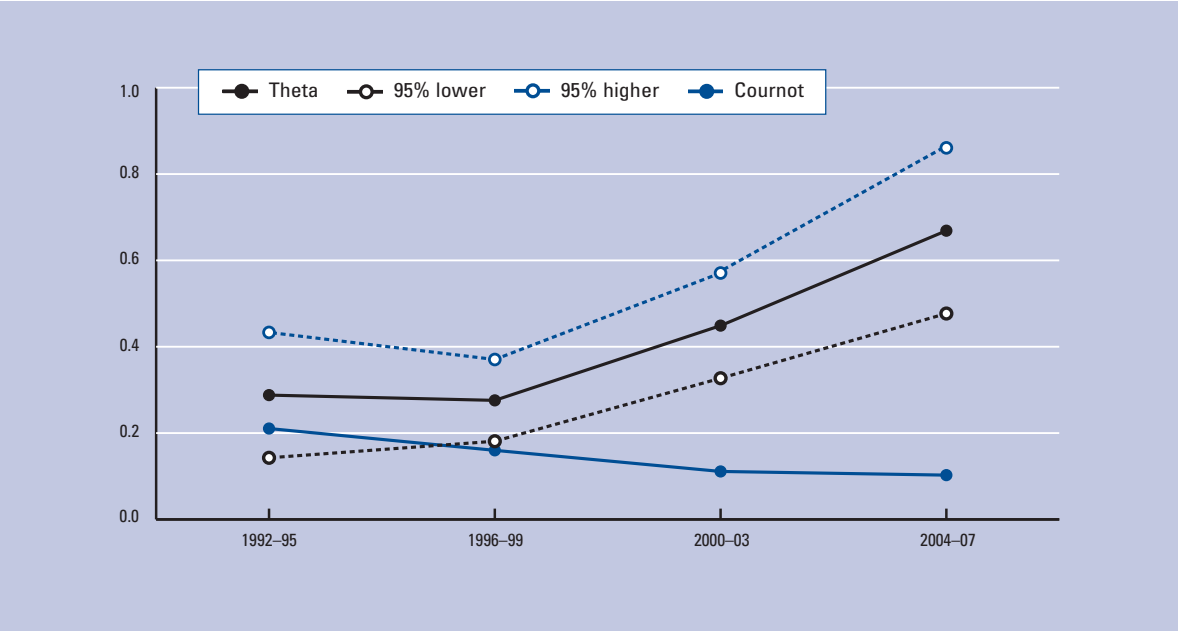
Authors' calculations.
Note: The theta and H values are point estimates of the degree of competition using two different methodologies. For the vertical axis, the units range from 0 to 1, but the economic meaning of the values of theta and *H* go in opposite directions—that is, for theta, 0 means more competitiveness while 1 means less competitiveness, while for H, H = 1 represents more competitiveness (perfect competition conditions). Along the time varying H-statistics, the years pass the equilibrium test, so we omit the H equilibrium line.

Figure 5: Evidence of bank industry demand elasticity in South Africa



Authors' calculations.

Figure 6: The industry average of bank competition in Algeria, 1992–2007



Authors' calculations.

Evidence for Algeria

We report in Figures 6 through 8 the evidence for Algeria from the two main approaches used in our study, which generate the theta and *H* metrics, respectively; the numerical values are reported in Appendix Table A4. The estimates of annual thetas, the industry average of competition in Algeria for the period 1993–2008, and their 95 percent confidence interval are depicted in Figure 6. It is shown that over the entire sample period, the results reject theta = 1, pure monopoly conditions, and theta = 0, perfect competition conditions. The results also reject the Cournot oligopoly, except during 1992–95. In general, therefore, the overall competitiveness conditions in the lending market in Algerian commercial banking are characterized by a higher level of oligopoly than Cournot, although there is a higher level of competition than joint profit maximization. The change in the degree of competition appears to decrease over time.

The sum of the elasticity of input prices with respect to profitability suggests that all four estimates pass the long-run equilibrium test. Figure 7 shows that the main results on the change in the degree of competition in Algeria holds when we look at the results derived from the *H*-statistics.

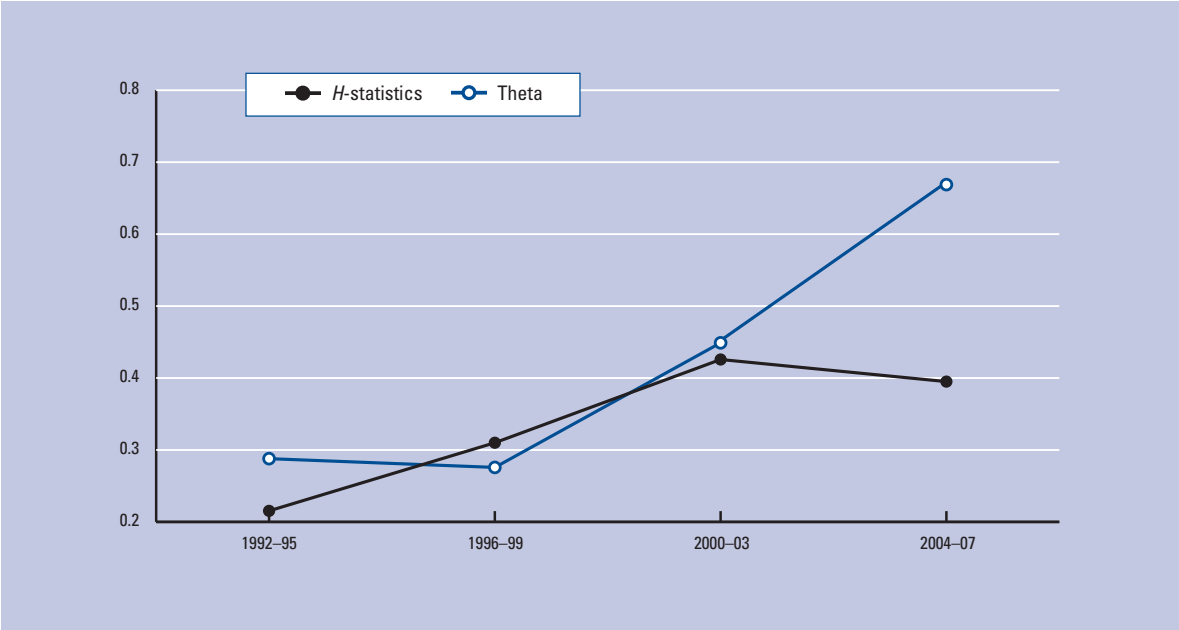
Demand elasticity for banking services in Algeria is close to 1, which means it is stable over the period (Figure 8)—that is, the industry demand did not change much during the period. There are two reasons why this may have happened. First, it is possible that during the period there was no threat to the credit supply from other financial institutions (e.g., non-bank financial intermediaries). Second, it is possible that the general macroeconomic environment in Algeria was stable at that time.

Evidence for Nigeria

We report year-by-year evidence for Nigeria from both the *H* measure and the theta measure in Figures 9 though 11. The corresponding numerical values are reported in Appendix Table A4.

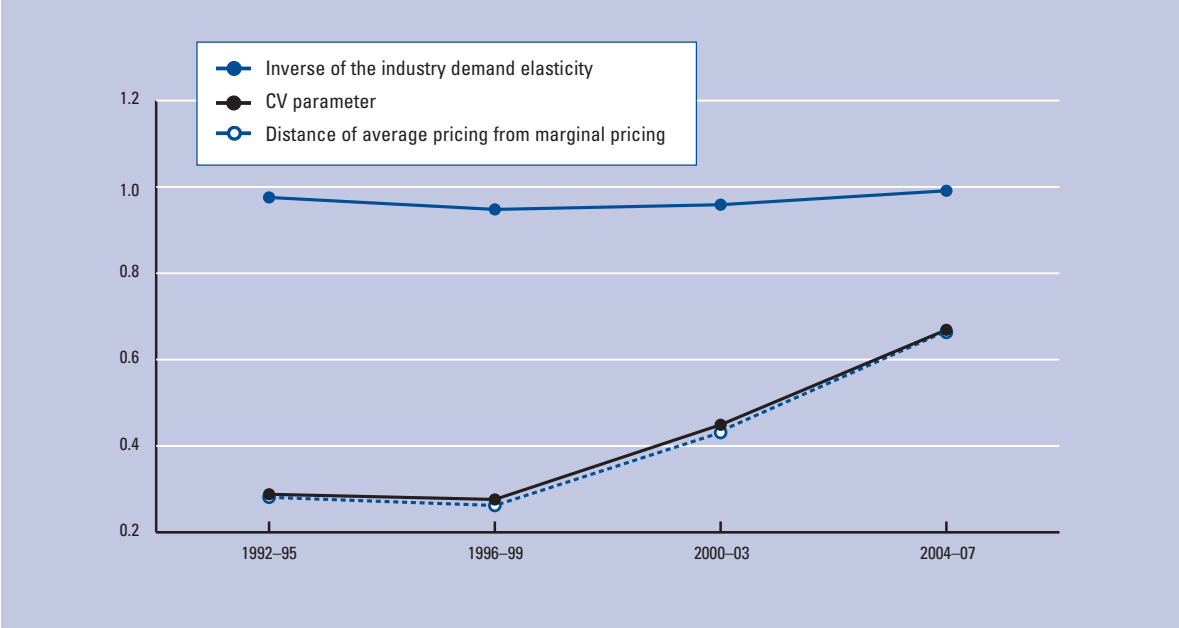
We recall from the second section of the chapter that Nigeria adopted a big bang approach to banking sector reforms. Figure 9 reports the estimates of annual thetas, the industry average of competition for the period 1993–2008, and their 95 percent confidence intervals. The results show that over the entire sample period, the evidence rejects the equation theta = 1, or the pure monopoly hypothesis. The Cournot oligopoly is also rejected except in 1997. Moreover, except for 1996 and 2008, when the market exhibited a super-competition situation, the results reject the perfect competition equation theta = 0. This implies that the degree of competition in Nigeria commercial banking is characterized by a certain level of oligopoly and was less competitive than Cournot. Regarding the change in the degree of competition during 1993–2008, it shows that competition improved after 1994 and ended up with a situation of super competition. The downward trend was inversed until 2001, followed by a new round of improvement

Figure 7: Theta parameters and the *H*-statistics for Algeria



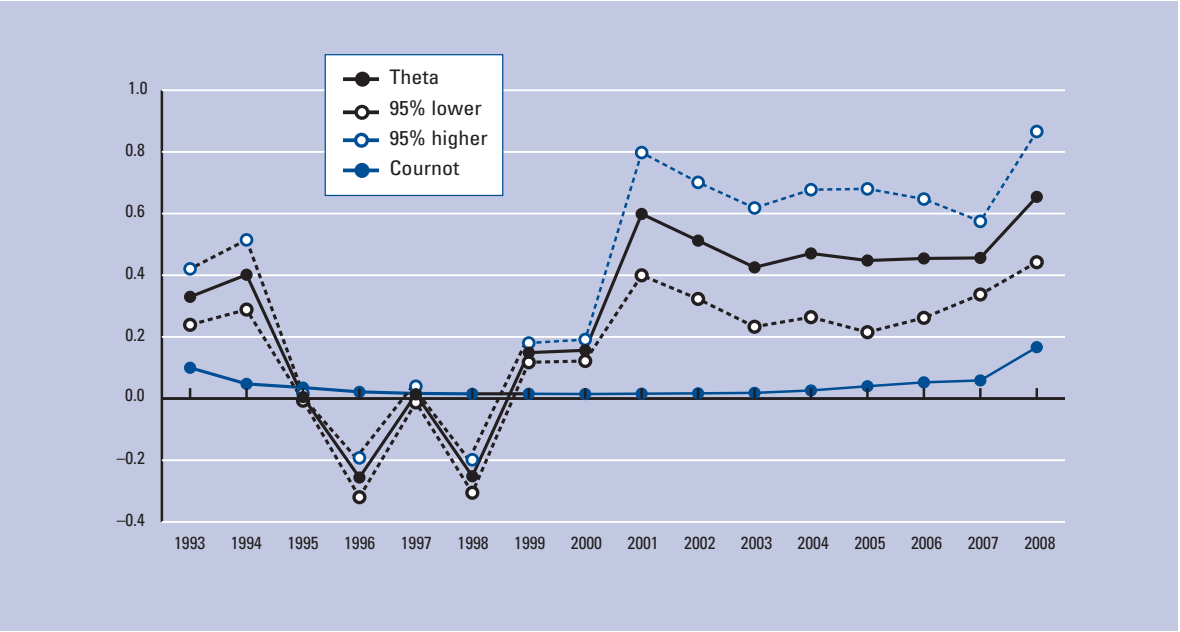
Authors' calculations.

Figure 8: Evidence of bank industry demand elasticity in Algeria, 1992–2006



Authors' calculations.

Figure 9: The industry average of bank competition in Nigeria, 1993–2008



Authors' calculations.

during 2001–07. Overall, the degree of competition seems to have improved after the reform period in 2005.

Figure 10 shows that the *H*-statistics results are generally consistent with the results derived from the conjectural variations approach.

The results in Figure 11 shows that the industry demand elasticity for commercial banking in Nigeria improved after the financial reform in 2005, compared with the period before. This evidence is consistent with the observations made earlier about the big bang banking sector reforms in Nigeria.

Evidence for Egypt

The evidence for Egypt from both the *H* measure and the theta is reported in Figures 12 through 14; the corresponding numerical values are reported in Appendix Table A4.

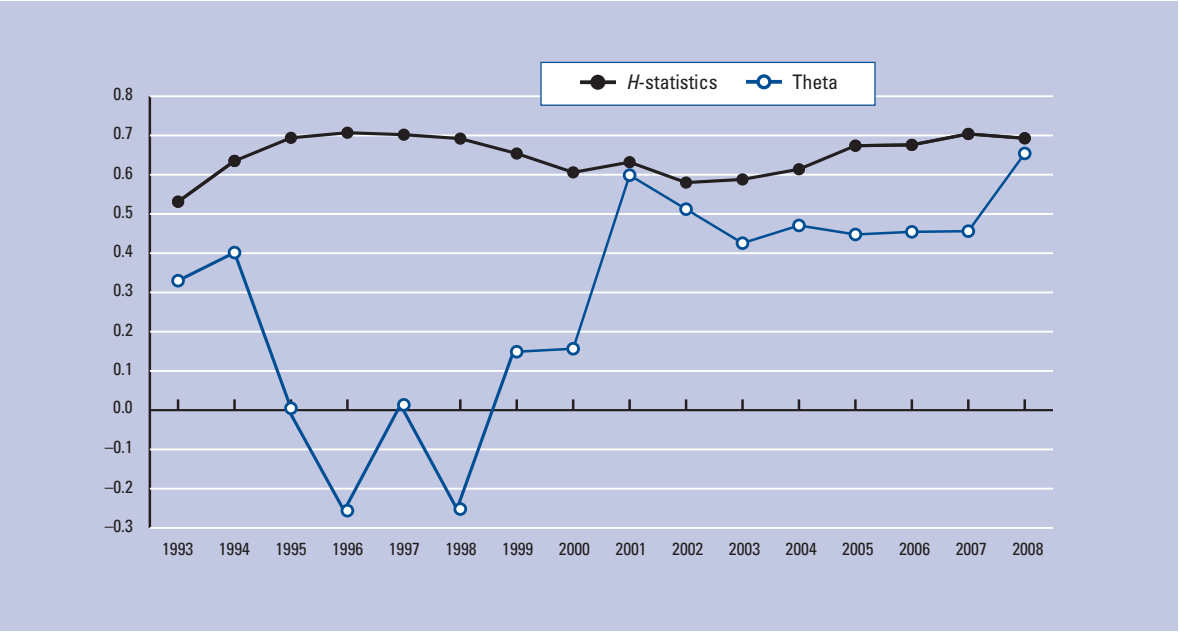
Figure 12 shows the estimates of annual thetas, the industry average of competition for the period 1993–2007, and their 95 percent confidence intervals. As shown, over the entire sample period, the results reject the equation theta = 1 or pure monopoly, the Cournot oligopoly, and the equation theta = 0 or perfect competition. Therefore, the degree of competition in Egypt commercial banking is characterized by a higher level of oligopoly than Cournot, although there is a higher level of competition than joint profit maximization. The change in the degree of competition during 1993–2007 indicates the shift from the improvement to the deterioration of competition, with 2000 being the watershed year.

Figure 13 confirms that, notwithstanding the general limitation of *H*-statistics, as far as the change in the degree of competition is concerned, the two approaches give similar results. In Figure 14, we report the Lerner index, which is simply the ratio of the theta measure of competitiveness to the value of the industry demand elasticity; hence, the index highlights the degree of bank competitiveness when demand for banking services are generally stable in the country. It is to be noted in Figure 14 that the Lerner index gives a gives a result similar to the theta parameter since the industry elasticity, in the case of Egypt, is very close to unity and appears to be stable over our sample period.

Policy implications and recommendations

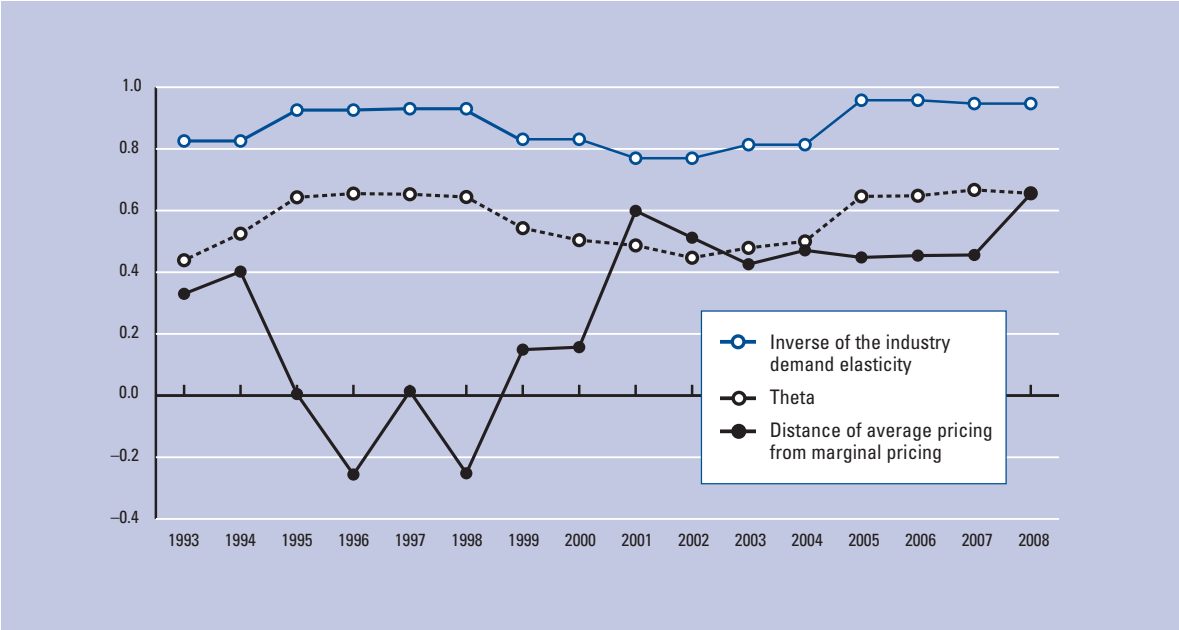
This chapter seeks to drive home the message that the largest four African economies, the SANE, have undertaken financial sector reforms, albeit with some differences in pace and approach, in order to enhance the competitive conditions in financial services. We place great weight on the banking sector because of its predominant role in Africa's financial systems. South Africa's approach is one of gradual restructuring, during which time South African banks have spawned the financial services sector in the rest of Africa; Nigeria has adopted a shock-treatment type of banking sector reform, which amounts to a big bang; Egypt presents mixed signals in terms of effort and success, which seem to suggest that the country should really go the extra mile now; and

Figure 10: Theta parameters and the *H*-statistics for Nigeria, 1993–2008



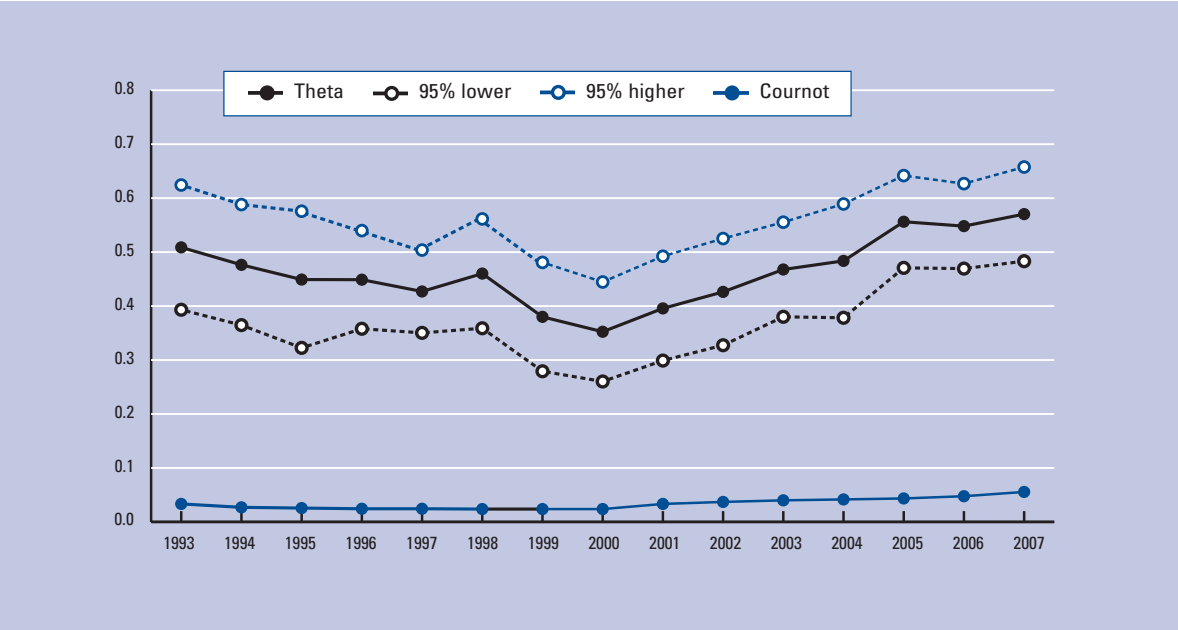
Authors' calculations.

Figure 11: Evidence of bank industry demand elasticity in Nigeria, 1993–2008



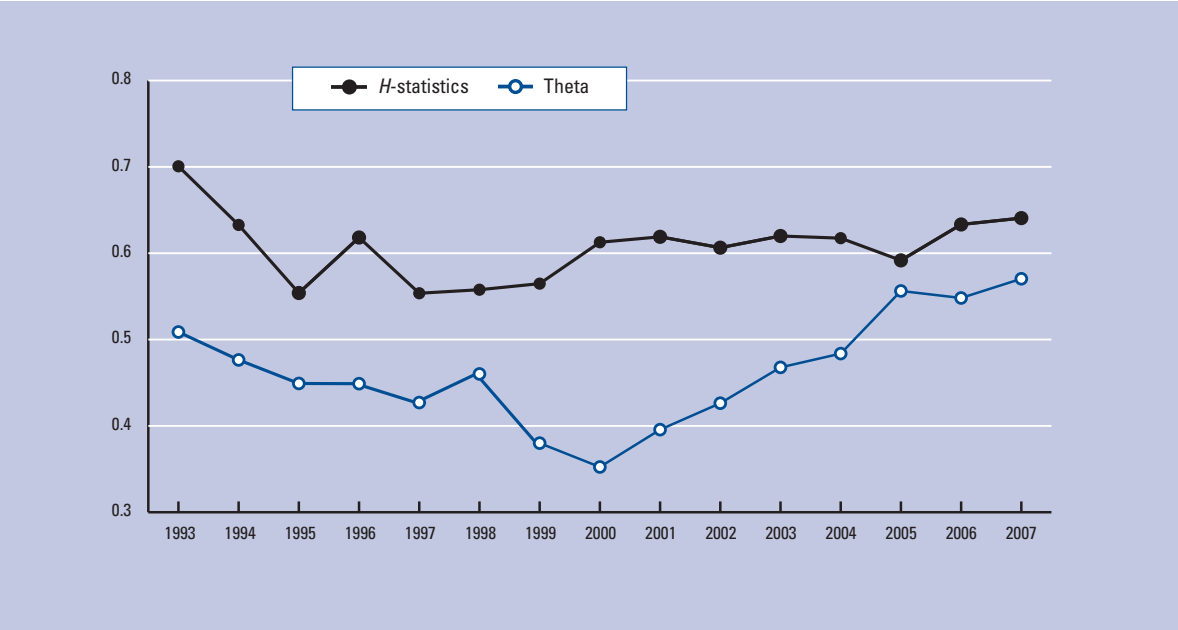
Authors' calculations.

Figure 12: The industry average of bank competition in Egypt, 1993–2007



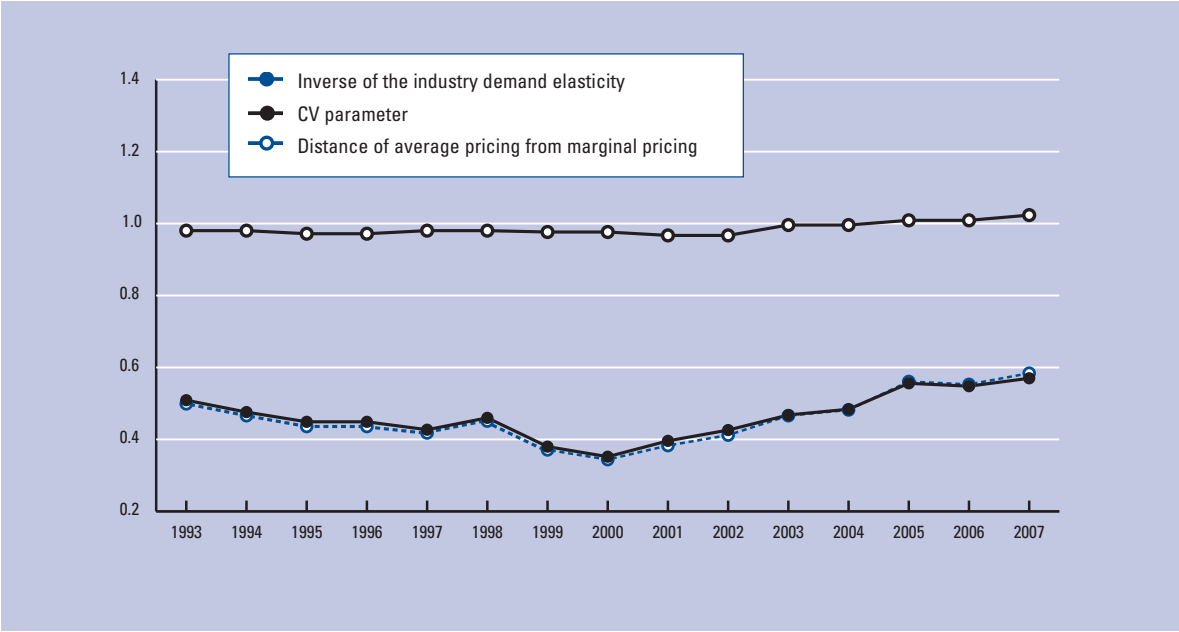
Authors' calculations.

Figure 13: Theta parameters and the *H*-statistics for Egypt, 1993–2007



Authors' calculations.

Figure 14: Evidence of bank industry demand elasticity in Egypt, 1993–2007



Authors' calculations.

Algeria, which has been a slow reformer, seems to be embracing full financial restructuring.

South Africa's gradualist approach offers some interesting lessons for other African countries. We trace the process of gradual financial restructuring in South Africa since the end of apartheid in the early 1990s, when the financial sector was restructured to become internationally competitive and play a leading role in Africa. What is particularly illustrative for other African economies is that in 2003, along with Botswana, Lesotho, Namibia, and Swaziland, South Africa agreed on a free trade agreement (FTA) designed to lower trade barriers and open markets; South Africa made commitments resulting in increased access to its market in all areas, including banking, securities, and insurance. This is a model that many other large, well-endowed countries may wish to consider, especially in view of the evidence that the South African banking sector represents stable competitive conditions.

Also, important lessons can be learned from Nigeria's adoption of a big bang approach to banking sector reforms in 2005, although broadly the reforms also involved the capital market, insurance, and pension services. Anecdotal evaluation seems to indicate that the reforms have created new developments and opportunities. We have noted that the banking sector has benefitted from the consolidation and recapitalization program initiated in 2006. It is fostering growth in the services sector as well as the broad private sector through increased financial intermediation, including stability in the financial sector, with stronger and larger banks having a larger capital base. Consolidation has also enhanced the ability of the financial sector to finance key growth sectors and has improved corporate governance.

The empirical evidence we have presented in this chapter shows that the reforms in Nigeria have engendered more competitiveness in the financial services sector. Overall, banks have been strengthened by the reforms and are now exploring new opportunities in markets beyond Nigeria into other parts of Africa. Raising the domestic banking market to international standards, where domestic banks have transparent corporate governance to enable them compete favorably with any new foreign banks in the market, is a policy objective that many African countries should emulate, especially in view of the current global financial crisis.

In the case of Egypt's experience with financial reforms, there are three main lessons for the rest of Africa. First, banking reform has led to the promotion of transparency and the use of adequate accounting and supervision standards. In Egypt this led to a friendlier investment climate that in turn yielded a strong private-sector supply response, according to the World Bank.[26] Second, there has been an increase in banks' deposit and lending rates to compensate for losses attributable to loan defaults; however, high real interest rates failed to increase savings or boost investment. Third, the quality of the legal system is important. Egypt has been committed to strengthening the legal, regulatory, and supervisory framework of the financial sector as a

whole, including forensic finance procedures. However, the financial sector continues to face important challenges because of the sector's low levels of competition, relatively high intermediation costs, limited innovation, and dominance of state ownership. The banking system is burdened by high levels of non-performing loans, while the non-bank segment is characterized by underdeveloped bond, insurance, and mortgage markets; thin trading in equities; weak corporate governance; and weak infrastructure for effective payment systems. The reform process continues.

In Algeria, although progress has not been at the same level as in other SANE economies, reforms have played an important role in ensuring effective intermediation of the country's large savings as well as improving bank governance. The development of the local capital market has yielded a number of benefits, and there is evidence of positive spillover effects from the financial services sector to the rest of the economy. Algeria has also made progress toward both global and regional economic integration, which compares well with earlier lessons from South Africa and Nigeria.

Competitiveness and efficiency are central to these economies as they become more service-oriented. Even in South Africa, which has the most sophisticated and relatively well developed financial system, only four big banks (out of a total of 22 local banks and 15 branches of foreign banks) control almost 84 percent of sector assets. These numbers do not necessarily imply greater competition unless the market structure is changed, however. Further, despite their domination of the financial system, local banks remain small in terms of assets and capital compared with emerging and international banks. Hence, an immediate policy question relates to reforming and restructuring the financial system, especially the banking sector. As previously noted, in Nigeria the recent restructuring and consolidation of the banking sector has made the sector stronger and safer, and contributed to the growth of the Nigerian Stock Exchange. Overall—and within the context of the WTO and specifically GATS, which requires countries to open their banking sectors to international competition—the banking sectors in African economies, such as South Africa or Egypt, are, to varying degrees, competitive enough to withstand foreign bank entry.

Finally, the current financial meltdown has important implications for financial reforms and bank competitiveness in Africa, especially in the SANE economies. The nature of the current global crisis is such that the vulnerability of African economies is non-uniform, although all economies seem to be currently characterized by distortions in external sector indicators. The global financial crisis has hit even countries such as South Africa and Nigeria, which have implemented financial-sector reforms and have displayed evidence of bank competitiveness, through their financial links with other world regions. Countries with relatively more developed and integrated financial sectors have suffered from considerable pressure on exchange rates, a decline in capital flows, a fall in equity markets, and scarcity of foreign finance for companies and banks. Hence, the current global financial crisis has the potential to derail many of the reforms in the financial services sector, especially because banks and capital markets are vulnerable as a result of globalization and contagion effects. However, the message from this chapter is that African economies that have undertaken key financial reforms and have competitive banking sectors are likely to recover from the crisis much faster than those countries that have not done so. Thus the immediate policy action lies in strengthening domestic banks and consolidation regional financial networks. Such action requires not only changes in legal infrastructure and trading of currencies but, more importantly, the political will to survive the global financial crisis.[27]

Notes

1 See the theory, evidence, and policy in Claessens and Laeven 2004, Green et al. 2005, Levine and Demirgüç-Kunt 2009, and Murinde 2009. For the special case of banks in OECD countries, see Cruikshank 2000 and Matthews et al. 2007; Kirkpatrick et al. 2008 present the evidence with respect to African economies.

2 Aghion et al. 2001 develop and highlight the theoretical and empirical link among financial reforms, productive efficiency, spillovers, and competitive conditions.

3 However, most of the African economies exhibited symptoms of financial repression during this period, although by the end of the 1990s most had embarked on financial reforms. See also the evidence in Kasekende and Atingi-Ego 1999 and Reinikka and Svensson 1999 on Uganda, as well as Senbet and Otchere 2006 and World Bank 2008 on financial sector reforms in some African countries.

4 Achua 2008 states: "The 89 banks that had hitherto existed in Nigeria were reduced to 25 in 2006" (p. 57); and "On January 3, 2006, the number of banks eventually shrunk to 25 and in the same month, 13 banks were closed because they had negative shareholders' funds and could not find merger partners or acquirers" (p. 61).

5 See Mboweni 2004.

6 According to the Central Bank of Nigeria's 2008 *Annual Report,* the main objectives of these reforms include the removal of controls on interest rates to increase the level of savings and improve allocative efficiency; elimination of non-price rationing of credit to reduce misdirected credit and increase competition; adoption of indirect monetary management in the place of the imposition of a credit ceiling on individual banks; enhancing of institutional structure and supervision; strengthening the money and capital markets through policy changes and distress resolution measures; and improving the linkages between formal and informal financial sectors.

7 This is according to a statement made by Minister of Finance Dr Mansur Muhta to the *Ghana Business News* on March 1, 2009.

8 See, for example, Ayogu and Emenuga 1998 on Nigeria; CBN 2008; Ikhide and Alawode 2001; IMF 2008; and Claessens and Laeven 2004.

9 The general view that bank consolidation generates a more concentrated system and, as a consequence, a less competitive one has not gained a clear supportive analytical argument in the literature; see Yeyati and Micco 2007. Indeed, the belief that the increased concentration would facilitate collusion among market participants advocated by the traditional SCP paradigm has been challenged by empirical evidence. A wide range of studies that analyze the US and EU experiences conclude that mergers seem to have been pro-competitive in general. As a whole, the existing literature seems to suggest that bank concentration is not an appropriate measure of bank competition and any effect of bank concentration on stability works through channels other than bank competition; see Beck 2008.

10 CBN 2009; see also http://www.vickywebworld.com/Free_Articles/Consolidation_of_Nigerian_Banking_Sector.htm (accessed March 18, 2009).

11 See also Baliamoune-Lutz 2008.

12 See also the reports in CMA 2008.

13 See Bank Audi 2008 for the Egypt Economic Report.

14 See World Bank 2008.

15 See the JSE, the SARB Annual Report, and the Governor's speech.

16 See World Bank 2008.

17 See Bank Audi (2008) for the Egypt Economic Report.

18 For example, the maximum scales of commission for all insurer-provided savings contracts were modified to ensure the following: a maximum rate of commission of 5 percent of premium; no more than half of the commission may be paid up-front, subject to a minimum discount rate and a maximum discount term; and a special provision to cater for small and emerging intermediaries selling low-premium business that the maximum proportion of up-front commission may be increased to more than half, subject to a maximum amount of R 400.

19 These observations are consistent the analysis of recent reforms in Africa as reported in Jefferis et al. 2006, Kirsten 2006, and SARB 2008.

20 See Kasekende et al. 2008.

21 See also Murinde and Ryan 2003.

22 See, for example, Kirkpatrick et al. 2008 on banking in selected African countries.

23 The two measures are inspired by the literature on "New Empirical Industrial Organization" (NEIO); the first is based on the Panzar and Rosse model, while the second is based on the Conjectural Variation approach (so-called CV approach). See Panzar and Rosse 1987, Matthews et al. 2007, and the review in Kasekende et al. 2008.

24 We bear in mind the main advantage of the *H* measure or Panzar and Rosse method—its low data requirement. Although its focus is on the competitive conduct in the output market, it does not require data related to output price and quantities. The key variables involved are the input price and total revenue. Moreover, since the *H*-statistics do not contain any specific hypothesized definition of the market, it is robust with respect to any implicit market definition (see Shaffer 2004). See the literature review in Kasekende et al. 2008 for the main advantages and limitations of the Panzar and Rosse model.

25 This has been observed by Shaffer 2004 in Canadian banking and by Gruben and McComb 2003 in Mexican banking.

26 World Bank 2008.

27 It may be argued that more competition may further encourage banks' risk-taking incentives. However, both the theoretical and empirical literature suggest that competition is a strong stimulus for an efficient financial system, and in the case where liberalization and competition have resulted in fragility, this has been mostly the consequence of regulatory and supervisory failures (see Beck 2008).

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Appendix A

Table A1: SANE economies and comparators, as of end 2007–08

	SANE economies					Africa	BRIC economies					Other
Indicators	South Africa	Algeria	Nigeria	Egypt	SANE	All Africa	Brazil	Russia	India	China	BRIC	Mexico
Area (1,000 km^2)	1,221	2,382	924	1,001	5,528	11,668	8,515	17,098	3,287	9,598	38,498	1,973
Population (millions)	48	34	148	75	305	964	191	142	1,169	1,306	2,808	105
Total GDP (US$ millions)	277,825	131,866	151,312	132,507	n/a	1,252,565	1,346,927	1,284,698	1,136,921	3,286,881	7,055,426	889,180
GDP growth rate (percent)	5.1	4.6	6.3	7.2	5.8	n/a	5.4	8.1	9.7	11.4	8.65	3.2
Per capita GDP (US$)	5,719	3,895	1,022	1,755	12,391	1,405	7,023	9,016	973	2,517	19,529	8,346
Number of NF listed companies	344	26	255	446	1,061	n/a	288	75	4,457	1003	5,823	111
Number of banks	34	20	24	48	126	741	36	582	81	70	769	40
Number of NBFI	25	73	772	44	914	n/a	73	1256	162	52	1,543	17
Stock market capitalization (US$ millions)	182,000	28,325	88,364	111,351	410,041	n/a	1,092,598	1,328,809	1,741,000	2,909,403	7,071,809	349,861
Trade balance (US$ millions)	–11,962	29,443	17,869	–10,828	24522	56,508	34,068	110,099	–70,069	262,200	336,298	–24,523
FDI inflows (US$ millions)	77,038	10,151	40,251	38,925	166,364	315,127	221,914	197,682	50,680	292,559	762,835	228,601
Export growth rate	19.96	0.93	–12.91	17.22	25.20	10.71	16.58	16.96	20.33	25.65	79.51	8.63
Merger and acquisition sales (US$ millions)	5,583	18	2838	1,219	9,657	17,569	10,035	8,677	6,716	6,724	32,151	2,024
Merger and acquisitions purchases (US$ millions)	5,138.4	n/a	21.0	5,199.8	10,359.2	11,207.8	20,444.7	3,377.8	4,739.6	14,904.3	43,466.37	4,039.9
Total long-term debt (US$ millions)	20,288.8	5,139.5	3,861.1	27,762.5	57,051.8	215,952.6	173,614.8	210,604.7	115,290.6	149,498.5	649,008.61	153,160.3

Source: Compiled by authors.

Empirical measures of bank competitive conditions

The Panzar-Rosse model

Following Claessens and Laeven 2004, among others, we estimate the following equations:

$$\ln(TR_{it}) = \alpha_i + \beta_{1t}\ln(w_{1it}) + \beta_{2t}\ln(w_{2it}) + \beta_3\ln(y_{1it}) + \beta_4\ln(y_{2it}) + u_{it} \quad (1)$$

$$\ln(\pi_{it}) = \beta_i + \beta_{5t}\ln(w_{1it}) + \beta_{6t}\ln(w_{2it}) + \beta_7\ln(y_{1it}) + \beta_8\ln(y_{2it}) + u_{it} \quad (2)$$

where

TR_{it} = interest income,
π_{it} = (1 + return on assets),
w_{1it} = interest expenses/(total deposits plus money market funding),
w_{2it} = other operating cost/total assets,
y_{1it} = total assets, and
y_{2it} = equity/total assets.

The second equation is used to test for the presence of long run equilibrium.

The *H*-statistics and the test for long-run equilibrium were performed on a yearly basis for each of the SANE economies. In accordance with the literature, we treat $H < 1$ as an increasing function of the degree of competition. The decision on the choice among pooled OLS, random effects and fixed effects is based on the Breusch and Pagan Lagrangian multiplier test for random effects and the Hausman test for fixed versus random effects.

Using the estimated coefficients from the above regression equations, we compute the *H*-statistic for the equilibrium conditions and the competitive banking environment, which are then interpreted as in Table A2.

(Cont'd.)

Appendix A *(cont'd.)*

The CV approach

Following Uchida and Tsutsui 2005 and Brissimis et al. 2008, we jointly estimate the following system of three equations that correspond to a translog cost function, to a revenue equation obtained from the profit maximization problem of banks, and to an inverse loan demand function:

$$\ln C_{it} = b_o + b_1 \ln q_{it} + \tfrac{1}{2} \star b_2 (\ln q_{it})^2 + b_3 \ln d_{it} + \tfrac{1}{2} \star b_4 (\ln d_{it})^2 + \ln w_{it} + \tfrac{1}{2} \star b_6 (\ln w_{it})^2 + b_7 \ln q_{it} \ln w_{it} + b_8 \ln q_{it} \ln d_{it} + b_9 \ln d_{it} \ln w_{it} + \delta_{it}^{c} \quad (3)$$

$$R_{it} - r_{it} q_{it} = \omega_o + \frac{\theta_t}{\eta_t} R_{it} + C_{it} (b_1 + b_2 \ln q_{it} + b_7 \ln w_{it} + b_8 \ln d_{it}) + C_{it} \star \frac{q_{it}}{d_{it}} (b_3 + b_4 \ln d_{it} + b_8 \ln q_{it} + b_9 \ln w_{it}) + \delta_{it}^{s} \quad (4)$$

$$\ln p_{it} = \rho_o + (-\frac{1}{\eta_t}) \ln q_{it} + \rho_1 \ln gdpg + \rho_2 \ln totalassets + \ln cap + \delta_{it}^{p} \quad (5)$$

where

C = the total non-interest cost, and is measured by total cost minus total interest cost;

q = the quantity of loans;

d = the total loanable funds, measured by the sum of total deposits and total money market funding;

w = associated with bank's cost other than funding raising and it is measured by the ratio of total non-interest cost to total business (the sum of loans and total loanable fund);

R = the interest income;

r = the implicit interest rate on loanable fund, and is measured by the ratio of interest cost to total loanable fund;

p = the implicit price of loans, and is measured by the ratio of interest income to total loans;

$gdpg$ = the real GDP growth;

total assets is used to capture the size effect; and

cap is measured by capital divided total assets, and is used to capture the difference across banks in risk attitude.

Variables, if they are not expressed as ratios, are measured in real terms.

Linear homogeneity of degree one in input prices is obtained by dividing C by w before taking logs. Following standard practice, we normalize each output quantity and input price variable by its geometric mean. In this way, the estimated first-order coefficients can be explained directly as the cost elasticity at the sample mean.

Table A2: Interpretation of the Panzar-Rosse *H*-statistics

Parameter region	Competitive environment test
H-statistics = $\sum_{j=1}^{k} \frac{\partial \ln GTR}{\partial \ln w_j}$, *GTR*: gross total revenue, *w*: factor prices.	
$H \leq 0$	• Monopoly, perfectly collusive oligopolist (Panzar and Rosse 1987). • Profit maximizing firm facing a fixed demand curve in short-run competitive equilibrium and conjectural-variations short-run oligopolist (Shaffer 1983). • *H* is a decreasing function of the perceived demand elasticity (Panzar and Rosse 1987).
Market in long-run equilibrium: $E = \sum_{j=1}^{k} \frac{\partial \ln PF}{\partial \ln w_j}$, *PF*: profitability (Shaffer 1983)	
$0 < H < 1$	• Monopolistic competition in a long-run equilibrium • Free entry (Chamberlinian) equilibrium excess capacity.
$H = 1$	• Perfect competition in a long-run equilibrium (Rosse and Panzar 1987) • Free entry equilibrium with full (efficient) capacity utilization.

Table A3: Interpretation of CV parameters

Equilibrium	CV parameters (λ_i)	$\theta = (\lambda_i + 1)$
Perfect competition	–1	0
Cournot-Nash equilibrium	0	S_i
Pure monopoly or perfectly collusive oligopoly	$\sum_{j \neq 1}^{n} x_j / x_{ji}$	1

$S_i = x_i / X$, indicate the market share of firm *i*.

Appendix A *(cont'd.)*

Table A4: Empirical measures of competitive conditions in the banking sector of SANE economies, 1992–2008

a: South Africa

Year	Theta (θ)	*H*-statistics	Industry demand elasticity (η)	Lerner index (θ/η)
1992	0.447	0.254	1.563	0.286
1993	0.125	0.328	1.563	0.080
1994	0.288	0.392	1.536	0.187
1995	0.174	0.394	1.536	0.113
1996	0.226	0.456	1.534	0.147
1997	0.259	0.425	1.534	0.169
1998	0.194	0.481	1.536	0.126
1999	0.276	0.419	1.536	0.180
2000	0.209	0.490	1.506	0.139
2001	0.172	0.479	1.506	0.114
2002	0.047	0.480	1.522	0.031
2003	0.040	0.498	1.522	0.026
2004	0.187	0.507	1.468	0.127
2005	0.240	0.538	1.468	0.163
2006	0.219	0.537	1.451	0.151
2007	0.203	n/a	1.451	0.140

b: Algeria

Year	Theta (θ)	*H*-statistics	Industry demand elasticity (η)	Lerner index (θ/η)
1992–95	0.288	0.215	1.025	0.281
1996–99	0.276	0.310	1.055	0.262
2000–03	0.449	0.426	1.043	0.431
2004–07	0.669	0.395	1.009	0.663

c: Egypt

Year	Theta (θ)	*H*-statistics	Industry demand elasticity (η)	Lerner index (θ/η)
1993	0.509	0.701	1.020	0.499
1994	0.476	0.633	1.020	0.466
1995	0.449	0.554	1.029	0.436
1996	0.449	0.618	1.029	0.436
1997	0.427	0.554	1.020	0.418
1998	0.460	0.558	1.020	0.451
1999	0.380	0.565	1.024	0.371
2000	0.352	0.613	1.024	0.344
2001	0.396	0.619	1.034	0.383
2002	0.426	0.606	1.034	0.412
2003	0.468	0.620	1.004	0.466
2004	0.484	0.617	1.004	0.482
2005	0.556	0.592	0.991	0.561
2006	0.548	0.633	0.991	0.553
2007	0.57	0.641	0.977	0.584

d: Nigeria

Year	Theta (θ)	*H*-statistics	Industry demand elasticity (η)	Lerner index (θ/η)
1993	0.330	0.531	1.211	0.439
1994	0.402	0.635	1.211	0.525
1995	0.005	0.694	1.080	0.643
1996	–0.256	0.707	1.080	0.655
1997	0.014	0.702	1.075	0.653
1998	–0.252	0.692	1.075	0.644
1999	0.149	0.654	1.203	0.543
2000	0.157	0.606	1.203	0.504
2001	0.599	0.632	1.299	0.487
2002	0.512	0.580	1.299	0.447
2003	0.426	0.588	1.229	0.479
2004	0.471	0.614	1.229	0.500
2005	0.448	0.674	1.044	0.646
2006	0.454	0.676	1.044	0.648
2007	0.456	0.704	1.056	0.667
2008	0.654	0.693	1.056	0.656

CHAPTER 1.4

Benchmarking Africa's Costs and Competitiveness

GIUSEPPE IAROSSI, The World Bank

After analyzing one aspect of the business environment with clear implications for the competitiveness of a country—finance—this chapter presents micro-level evidence of how individual firm–level costs in Africa contribute to its competitiveness or lack thereof.

Is Africa a low-cost site from which to run a business? Although data on production costs are not easily available, a number of reports and anecdotal evidence clearly show that Africa is far from being a low-cost production site. A combination of factors linked to the institutional and physical business environment make the African continent one of the most expensive places in the world to produce. By some estimates,[1] as much as 25 percent of sales of firms in some African countries are lost because of impediments of the investment climate such as unreliable infrastructure, contract enforcement difficulties, crime, corruption, and poor regulation. These losses are, at times, much higher than taxes paid. Additional evidence estimates the indirect costs faced by African firms at around 20 to 30 percent of total costs, a value often higher than labor costs.[2] The impact of such production costs on Africa's competitiveness seems to be above and beyond what is experienced by other regions in the world. By some estimates, Kenya's factory floor productivity is close to China's; but once we account for indirect costs, Kenyan firms lose 40 percent of their productivity advantage when compared to Chinese firms.[3] Additional firm-level evidence shows that, although labor costs in a number of African countries are competitive internationally, Africa manufacturers are much less so[4]—as demonstrated by the fact that trade in manufacturers in Africa account for just 2 percent of world trade.

A critical measure of any country's competitiveness is represented by its production cost structure. The existing literature has shown the potential loss in productivity due to costs faced by firms outside their factory gates, and investors do pay attention to these costs when deciding on a site location.[5] This chapter therefore attempts to expand the available evidence on production costs in Africa by expanding the categories of costs and the number of countries taken into account.[6] Our aim is to analyze the most important costs faced by African firms and show how critical these are for their productivity and competitiveness. We look at three types of costs: direct costs, indirect costs, and invisible costs. First we examine what are generally defined as *direct costs*—that is, those factory floor costs associated with the production process itself such as labor, capital, and electricity.

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We then look at *indirect costs*—that is, those costs associated with getting what is produced to market as well as those associated with the broader business environment in which the firms operate. Finally we look at *invisible costs*—that is, those losses experienced by firms as consequence of the poor quality of the business environment. More specifically, we look at losses due to excessive collateral requirements to access credit, poor infrastructure services (power interruptions and transport delays), unpredictable regulatory environment, corruption, and lack of security. After discussing these costs separately, we look at them together and estimate their impact on the value of sales in order to benchmark Africa with other regions. The chapter concludes with policy recommendations.

The evidence presented in this chapter shows that firms in Africa are almost 20 percent less competitive than firms in the other regions, although considerable variation exists across countries. Compared to firms in East Asia, for example, it costs African firms 19 percent more to produce one unit of sale—a considerable competitive disadvantage. As the global crisis looms on the African continent, this finding implies that Asian firms enjoy a much higher margin to absorb price shocks than African firms, while remaining viable producers.

In this chapter we draw mostly on data from the Enterprise Surveys and the Doing Business indicators. The Enterprise Survey data used in this chapter include 93 countries worldwide, of which 32 are in Africa. The values presented are therefore representative of the typical urban-registered firm in each country where the Enterprise Surveys data are employed, or the typical small- or medium-sized enterprise (SME) that is in full compliance with rules and regulation when the Doing Business data are used (see Box 1).[7]

Direct costs

Direct costs are those factory floor costs associated with the production process itself. The three primary direct costs are labor, capital, and electricity; each is addressed in the sections below.

Labor

According to a study covering nine African countries,[8] wage levels remain the most important cost element attracting foreign investors. In typical sectors such as apparel, textile, food, and horticulture, wage considerations account for up 43 percent of the investors' cost motivations. This evidence, together with the fact that labor cost is associated with income per capita, should put Africa at the top of the world's competitiveness list. Being a low-income and relatively low cost-of-living location, the continent should be well positioned to offer competitive labor cost.

This happens to be true only in part. If we look at levels of labor cost across regions,[9] we see that Africa

Box 1: Enterprise Surveys and Doing Business indicators

The World Bank's **Enterprise Surveys** collect both perceptions and objective indicators of the business environment in each country. The data are collected through face-to-face interviews with hundreds of entrepreneurs; hence responses reflect the managers' actual experiences. The data collected span all major investment climate topics, ranging from infrastructure and access to finance to corruption and crime. Detailed productivity information includes firm finances, costs such as labor and materials, sales, and investment. The breadth and depth of data allow across-country analysis by firm attributes (size, ownership, industry, etc.), and can probe the relationship between investment climate characteristics and firm productivity. Every year, 15–30 Enterprise Surveys are implemented, with updates planned for each country every three to five years. This reflects the intense nature of administering firm surveys and for the firms responding to the many, detailed questions. So far over 110 countries have been surveyed, including over 20,000 entrepreneurs, senior managers, and chief executive officers in 38 African countries. In 10 countries in Africa surveys have been conducted more than once; hence panel data are also available to researchers around the globe. For more information visit http://www.enterprisesurveys.org/.

The World Bank's **Doing Business indicators** are updated on an annual basis, providing a quantitative measure of a particular aspect relevant to competitiveness: business regulation and the protection of property rights as well as their effect on businesses, especially small- and medium-sized domestic firms located in the most important business city. They are based on a survey of local experts in law and accounting who interact with a large number of firms; hence responses reflect what firms should do if they fully complied with regulations. Constancy of firm description across countries allows for a straightforward comparison and ranking by country for the various indicators. Ease of use makes this a useful tool for policy analysis. The data entail in-depth research and exchange with experts on laws, regulations, and institutions covering specific aspects of firm entry, operation, and exit. More specifically, the data cover the following ten topics: starting a business, dealing with construction permits, employing workers, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and closing a business. The most recent data cover 181 economies. Fifty countries in Africa are represented, reflecting the responses of 6,700 experts (including lawyers, business consultants, accountants, freight forwarders, government officials, and other professionals routinely administering or advising on legal and regulatory requirements). Data are collected annually; each year expanded collection (covering more economies and indicators) is planned. For more information visit http://www.doingbusiness.org/.

enjoys only a moderate comparative advantage. After controlling for a number of factors—such as income per capita, cost of living, firm size, and sector of activity—we see that labor costs in Africa are at least 10 percent higher than they are in East Asia, while South Asia retains its strong comparative advantage over Africa with around 40 percent lower labor costs.[10] For the typical firm, labor costs are higher in Africa than in Eastern Europe and Central Asia or Latin America, but South and East Asian regions are more competitive. On the African continent, workers cost on average US$135 per month; the same worker will cost more than twice that in Eastern Europe and Central Asia and in Latin American and the Caribbean, but much less in South Asia and East Asia. This means that—in nominal terms, without controlling for any other factors—the South and East Asian regions enjoy a labor cost advantage over Africa of 25 percent and 60 percent, respectively.[11]

Within Africa, exporters and FDI firms pay more (10 to 15 percent more) in labor costs, but they pay less in East Asia and in South Asia in nominal terms. An exporter in Africa pays around US$150 per worker monthly, while the same worker costs less—around US$110 in East Asia and less than US$70 in South Asia. Given that exporters use higher skills, this is a significant cost disadvantage for African firms (see Figure 1).

One component of labor cost is represented by mandatory labor contributions, such as social security. This cost is particularly high in Africa, where it is 12 percent—second only to the costs in Eastern Europe and Central Asia, where it reaches 21 percent. The data again show a wide cross-country variation in Africa. In some countries (e.g., Namibia), social security is almost nil, while in others (such as Algeria) it surpasses a quarter of a worker's gross salary.[12]

In conclusion, our data show that Africa does not enjoy as much of a comparative advantage with respect to labor cost as we would expect, given its level of per capita income. Both labor costs and social security contributions are relatively high, and though a wide cross-country variation does exist, in the great majority of African countries labor costs are much higher than they are in main competitor countries such as India and Vietnam; in half of African countries, labor cost is higher than China's (Figure 2).

Capital

Firms around the world need credit to be able to function. A sound business environment requires an efficient financial system capable of allocating resources to their most productive uses. Yet evidence from firm-level surveys shows that the cost of finance tops the charts of firm complaints around the globe. African entrepreneurs together with Latin American and Caribbean managers complain even more than firms in all other regions. So is the cost of capital really higher in Africa?

We attempt to answer this question by first looking at the *prime rate* that banks charge when lending to their best customers.[13] A cross-regional analysis of finance cost shows clearly that, if they are located in Africa, even the best customers are charged a much higher interest rate. More specifically, firms in Africa pay around 7 percent more in interest rates than firms in East Asia and in South Asia.[14] In Eastern Europe and Central Asia, the difference is 4 percent. In the main competitors such as India, Thailand, Vietnam, and China, borrowing funds is up to 40–70 percent cheaper than in Africa.

The Enterprise Survey data confirm this picture by showing that firms in Africa pay, on average, an interest rate of 15 percent—close to 5 percentage points more than firms in East Asia and 2 percentage points more than those in South Asia, in nominal terms. Furthermore, since the interest rate charged by banks could be correlated with firm characteristics, we use these data to analyze capital cost after accounting for size, industry, export orientation, ownership, collateral requirements, sales, and value of machinery. Even after accounting for these costs, firms in Africa pay around 3–5 percent more in interest rates than firms in East Asia. The inability of banks to allocate credit more cheaply is reflected in the higher bank spreads seen in Africa. This phenomenon could be related to inefficiencies in the banking system and to lack of competition in addition to the higher risk associated with African firms.

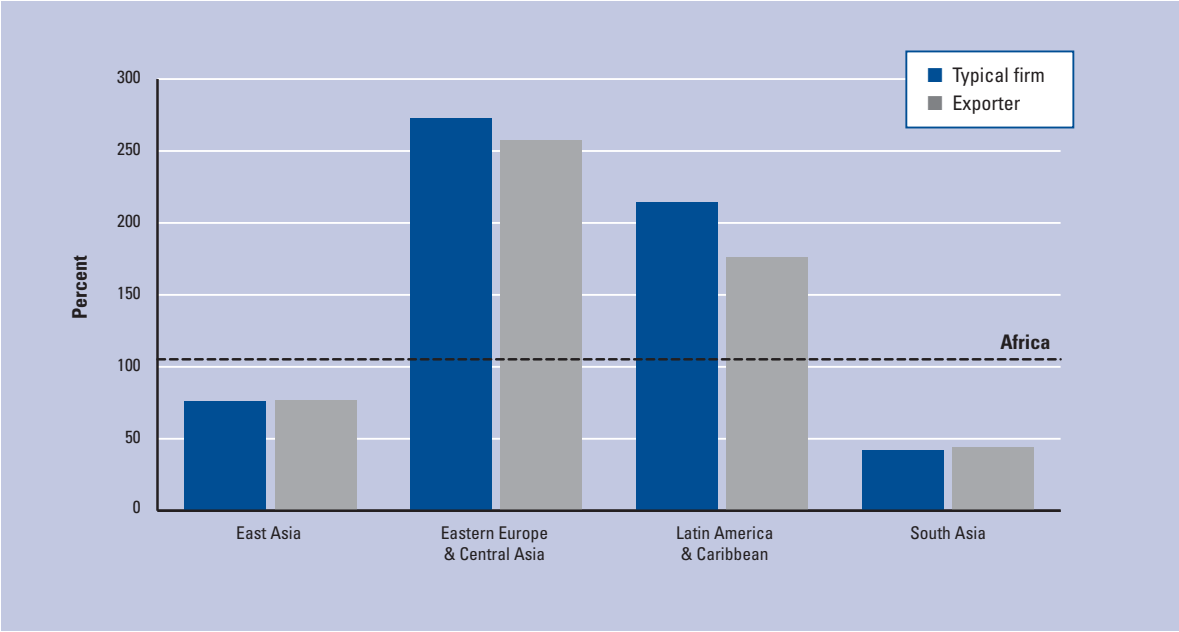
Finally, our survey data confirm that the smaller the firm, the more expensive its credit when it finally receives it. In Africa, smaller firms pay an interest rate that is 1 percentage point higher than the interest paid by medium firms and 3 percentage points above the interest paid by large firms.[15]

Electricity

We were able to document electricity costs in 2006 for 48 developing countries, of which 19 are in Africa. According to these data, one kilowatt hour (kWh) of electricity for industrial use in Africa costs, on average, US$0.068. Of all the regions documented, only in South Asia is electricity costlier, although this average is really driven by the high cost in Sri Lanka (US$0.137/kWh), while in India electricity costs US$0.06/kWh. Figure 3 shows that Africa is not competitive in terms of this key infrastructure cost. Firms in East Asia pay, on average, 7 percent less than firms in Africa for electricity, but firms in India and Vietnam pay some 11 percent less—and even less than this in Brazil. As always, there is wide variation within Africa. Electricity costs are as low as approximately US$0.04 in Lesotho and Botswana and as high as US$0.14 in Senegal.[16]

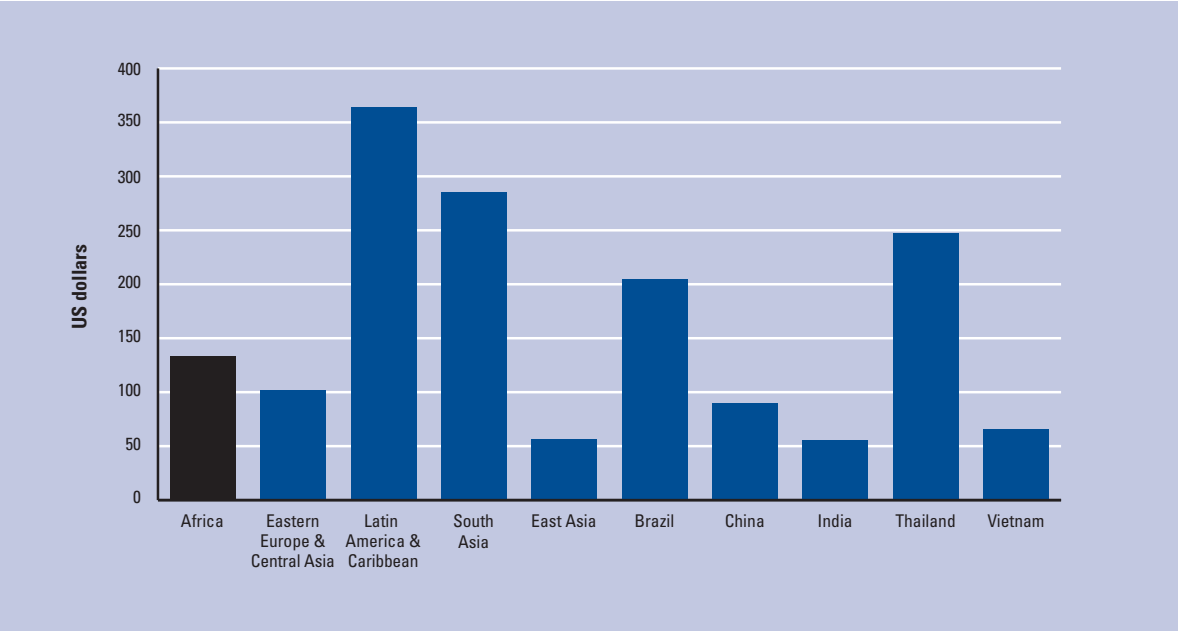
Finally, it is interesting once again to see that in oil-rich countries electricity is 20 percent cheaper, while in landlocked countries it is 15 percent more expensive.[17]

Figure 1: Labor cost advantage or disadvantage: Africa vs. selected regions



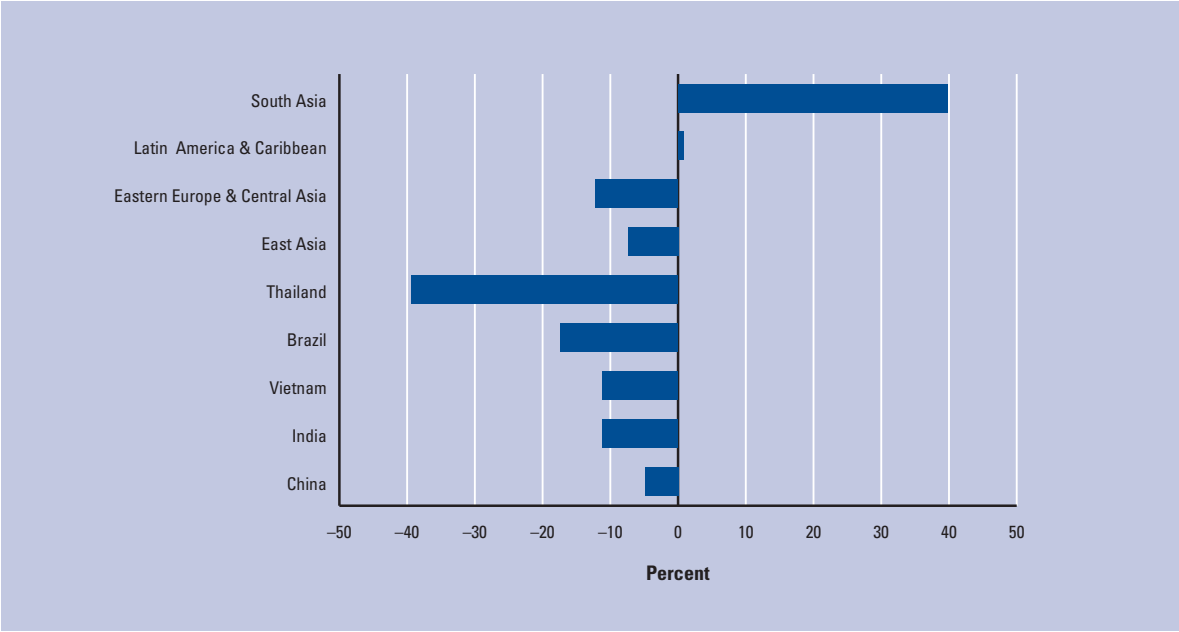
Source: Author's calculations using Enterprise Surveys (various years).

Figure 2: Monthly labor cost per worker: Africa vs. selected comparator countries and regions



Source: Author's calculations using Enterprise Surveys (various years).

Figure 3: Difference in electricity costs: Africa vs. selected developing countries and regions, 2006



Source: EIU, 2009; China data are from the World Bank.

Indirect costs

Indirect costs are those incurred by firms in order to get what is produced to market as well as those associated with the broader environment in which they operate. The two crucial indirect costs are transport and regulation.

Transport

One important aspect in the global supply chain is represented by inland transportation costs. To be competitive it is essential to be able to move goods within a country cheaply. Africa's geography does not help in this regard. A huge continent with a low ratio of roads per square kilometer and large distances represents a natural obstacle to competitiveness. Furthermore, Africa is the continent with the highest number of landlocked countries (two out of five landlocked countries in the world are in Africa).

Not surprisingly, inland transportation costs are higher in Africa than in other regions. It costs US$1,100, on average, to ship a typical container with imports inland; it costs US$872 for exports. This is higher than all other regions except Eastern Europe and Central Asia, where it costs US$1,141 and US$989, respectively. East Asia, South Asia, and Latin American and the Caribbean, on the other hand, enjoy a significant comparative advantage with respect to transport costs. Firms in East Asia save close to 70 percent in transportation costs, while firms in Latin America and South Asia save approximately 50 percent (Figure 4).

In addition, being a landlocked country obviously adds to the transportation cost. Being landlocked in Africa adds even more. African landlocked countries pay close to one-third more in inland transportation costs than landlocked countries outside Africa (US$2,200 versus US$1,500). Those are significant costs that penalize firms in the continent.

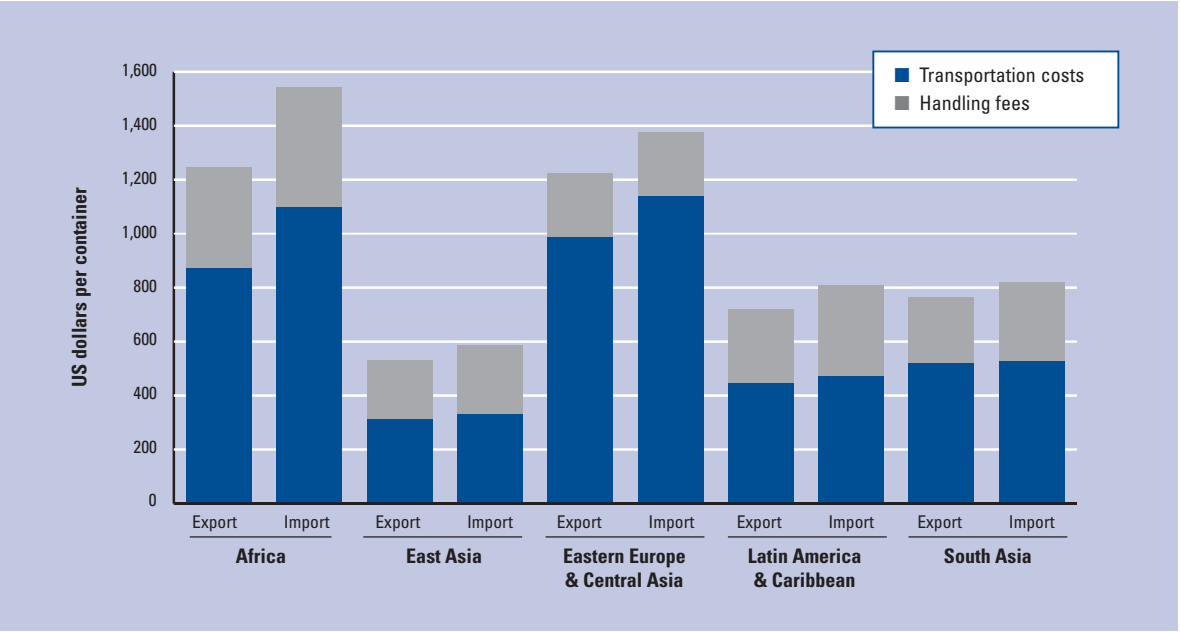
Another important aspect of transport costs is represented by port and terminal handling fees. These costs vary widely around the world, ranging from as low as US$50 to as high as US$1,000 per container. Africa not only displays the highest variation across countries (you can pay almost 10 times more in Côte d'Ivoire than in Mauritius, where these fees are only US$100), but again it remains the region with the highest average cost for both import and export handling fees.

Regulatory environment

Taxes. Governments around the world need to provide the necessary services to ensure a good business environment. To achieve that, they levy a number of different taxes at different levels of administration. Being impossible to take all of them into account, we consider the three most common: corporate income tax, property tax, and value-added tax (VAT).

Corporate tax rates vary considerably across regions, but Africa, together with South Asia, appears to be the least tax-friendly location to corporations.[18] With a rate of approximately 30 percent, African firms seem to be among the most highly taxed firms in the world. The difference with most regions, however, is not striking. In East Asia and Latin America, tax rates are 28 percent and

Figure 4: Inland transport costs and port handling fees for import and export



Source: World Bank, 2008.

29 percent, respectively. Only in Eastern Europe and Central Asia are rates significantly lower, at 19 percent. The data also show a wide dispersion within each region, and especially within Africa. Botswana has the lowest corporate income tax in the world, with a 5 percent rate, while the Democratic Republic of Congo and Chad share with Bangladesh the highest rate at 40 percent. Nonetheless, corporate tax rates in Africa are similar to those in China, India, and Vietnam.

Except for South Asia—with a rate of 21 percent—Africa is the location with the highest property tax. Firms on the continent have to pay, on average, 7.5 percent of the value of the property in taxes. This is much higher than the 4.7 percent and 2.7 percent firms pay in East Asia and Latin America and the Caribbean, respectively. A similar picture emerges if we look at VAT. Africa applies one of the highest average rates at 16 percent (second only to Eastern Europe and Central Asia, with 19 percent), while VAT in all other regions amounts to 11–14 percent. As seen before for corporate tax, the spread of rates across the African continent is the widest, with Nigeria charging only 5 percent (as much as Singapore and Taiwan, China) while Tanzania charges 20 percent. Only Argentina charges more. Overall, if we look at all these costs on a comparative scale, we see that, with only two exceptions, Africa has a higher level of taxation than other regions (see Figure 5).

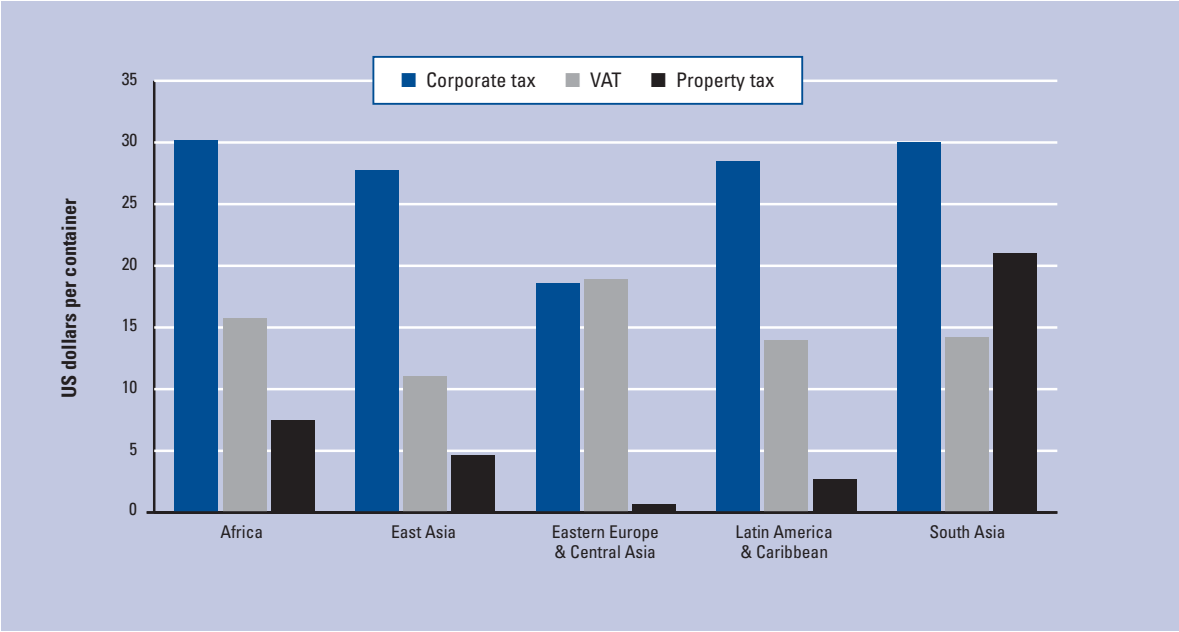
Regulations. The quality of the regulatory environment can encourage or discourage potential entrepreneurs to start a business, to expand its activity, or even to enter the formal economy. Evidence from other studies has shown that lower regulatory barriers stimulate entry into the formal sector.[19] Is Africa a location with a friendly regulatory cost environment? We try to answer this question by looking at the costs associated with three indicators: establishing a business, registering property, and dealing with customs.

Starting a business in Africa is not expensive in nominal terms. The total cost of the startup procedures and the minimum capital requirements add up to approximately US$2,350. This is less than startup costs in East Asia or Eastern Europe and Central Asia, where starting a business runs around US$3,700.[20] However, if we take into account the average income per capita, then establishing a company in Africa becomes quite expensive. The total cost rises to 135 percent of annual income—more than double the cost in all other regions.

Registering property is also an expensive process in Africa. Over 10 percent of the value of the property is spent on registration fees. This cost is much higher than in all other regions, where it ranges from 2 to 6 percent. At the extreme, Africa has countries where the registration cost gets closer to a quarter of the value of the property (Zimbabwe, Chad, and Nigeria).

Finally, another important regulatory cost is that of customs clearance. In all countries, the great majority of firms import and export their inputs and goods. When exporting or importing, firms must follow the regulatory procedures enacted in each country. The costs associated with these procedures include the preparation of

Figure 5: Tax rates: Africa vs. selected regions



Source: World Bank, 2008.

documents, administrative fees, and technical control charges. If we sum up all these costs, we see once again that Africa is the most expensive region among those taken into account. Firms in Africa must pay US$585 or US$682 each time they need to comply with import and export regulatory requirements. Firms in all other regions pay much less; in particular, firms in East Asia pay around 60 percent of the amount African firms are charged (Figure 6).

Invisible costs

Losses experienced by firms because of the poor quality of the business environment are considered invisible costs. In the following section, we consider losses caused by bank financing requirements, unreliable infrastructure, excessive regulations, corruption, and security concerns.

Losses due to bank financing requirements

In the great majority of cases, firms are asked to provide collateral when applying for loans. Moreover, the value of the required collateral is usually higher than the value of the loan. In Africa, the value of the collateral that establishments are required to post to obtain a loan is the second highest in the world—equivalent to 137 percent of the value of the loan. Eastern Europe and Central Asia has the highest requirement of all, at 54 percent above the loan value, compared to East Asia and South Asia, where firms post collateral at only 13 percent and 3 percent above the value of the loan, respectively.

This restriction limits access to finance for firms since, for a given amount of fixed assets, the higher the collateral requirements, the lower the ability of firms to secure credit. So, for instance, since African firms are asked to post collateral for 137 percent of the value of the loan, they can obtain loans equivalent to only approximately 57 percent of the value of their fixed assets. This represents a cost for firms because, for a given loan amount, they need to provide more guarantees than firms in other regions. We estimate such loss as the interest paid on the *additional* value of collateral that firms must post because of higher collateral requirements, where *additional* is defined as the value of collateral in excess of the median value observed in each country.[21]

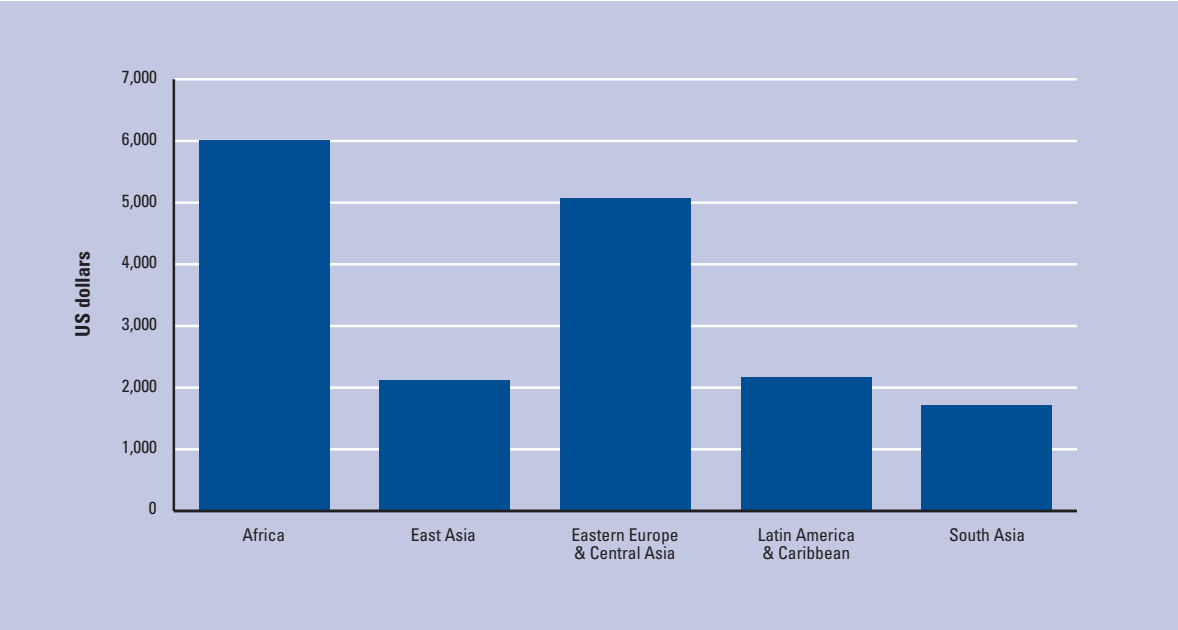
According to these estimates, because of more stringent collateral requirements, firms in Africa have to pay an additional hidden charge in order to secure a loan. Under the assumption that firms in each country would be required to post collateral not higher than the median value of the loan, the estimated loss in additional interest paid by African firms is US$6,000 a year, the highest of all regions. In other words, if those firms in Africa that post a collateral above the median value would be allowed to reduce such collateral requirements to a value equal to that posted by the median firm, they would save, on average, US$6,000 a year. Firms in East Asia experience a much lower loss, estimated at 40–70 percent of that in Africa (Figure 7).

In terms of fixed assets, the typical exporter in East Asia has three times as much as an exporter in Africa.

Figure 6: Regulatory costs: Africa vs. selected regions

Source: World Bank, 2008.

Figure 7: Estimated yearly cost of additional collateral requirements: Africa vs. selected regions



Source: Author's calculations using Enterprise Surveys (various years).

Consequently it experiences higher losses than firms in Africa in nominal terms. However, these losses are less than proportional to the value of the fixed assets, demonstrating that even exporters in Africa pay more to obtain a loan of a given amount. Furthermore, exporters in South Asia, where exporters have an average value of fixed assets approximately equal to those in Africa, lose just one-fifth of the amount African exporters do because of excessive capital requirements in African countries.

Losses due to unreliable infrastructure services

Electricity. Findings from many firm-level surveys have highlighted the importance of a reliable power supply. And yet for different reasons—strong economic growth in some places, economic collapse in others, war, poor planning, population booms, high oil prices, and drought—sub-Saharan nations face crippling electricity shortages.[22] Evidence from the Enterprise Survey data shows how serious this problem is. Firms around the world experience power outages that last from few minutes to hours. Africa holds the unenviable record of being one of the worst places, experiencing the longest outages. In some countries in the continent, power losses last approximately 12 hours. As a consequence, firms in Africa lose power, on average, for 13 percent of their working hours. This is much higher than in all other regions. In East Asia, for example, firms lose power for only 1 percent of their working hours. South Asia is the region closest to Africa, and yet firms there lose power for only 7 percent of the working hours (see Figure 8).

Unreliable power has severe cost implications for firms. They will either lose sales or they will have to buy generators. As a matter of fact, many firms purchase generators. After South Asia—where 50 percent of firms have generators—Africa has the highest share of firms with generators, at 38 percent. In East Asia, only 30 percent of firms do. A much larger share of exporters in Africa own a generator—60 percent, at par with South Asia and much more than East Asia exporters, where it is 38 percent. Generators, however, are expensive, with prices that range from a couple of thousand dollars to almost a million dollars, depending on capacity. Consequently not all firms can afford to buy them. Therefore firms experience two types of losses associated with power disruptions: one is the actual loss in sales for those firms that do not have a generator, and the second is the financing cost of buying a generator for those that own one.[23] By estimating these costs across countries, as expected, we see first that the losses sustained by those firms that do not own a generator are higher than the cost of financing a generator.[24] Furthermore, the average loss due to power outages for firms in Africa is the second highest of all regions after South Asia. On the continent, firms lose almost US$9,000 a year because of power unreliability. Firms in East Asia lose 40 percent less than firms in Africa.[25]

Transport. The inefficiency of the transport system can add to production costs in subtle ways, such as by requiring firms to hold higher inventories than they would otherwise. If the delivery time of inputs is uncertain, firms will have to order inputs ahead of what would otherwise be the optimal time. This implies an additional cost represented by holding unwanted fixed investments for an extra period of time. If firms adjust their inventory stock according to the efficiency of the transport system, we can estimate the cost of holding unnecessary inventory as the cost of borrowing the necessary funds to purchase such inventories. By doing so, we see that firms in Africa lose some US$850 a year in additional interest paid solely to buy inventories in advance. This amount is similar to what firms in Latin America and the Caribbean pay, and less than what is paid by firms in South Asia and in Eastern Europe and Central Asia. However, this estimated loss is 40 percent higher for African firms than for firms in East Asia. Competitor countries such as India and Vietnam also enjoy lower transport losses than the African average (Figure 9).

Losses due to regulatory environment

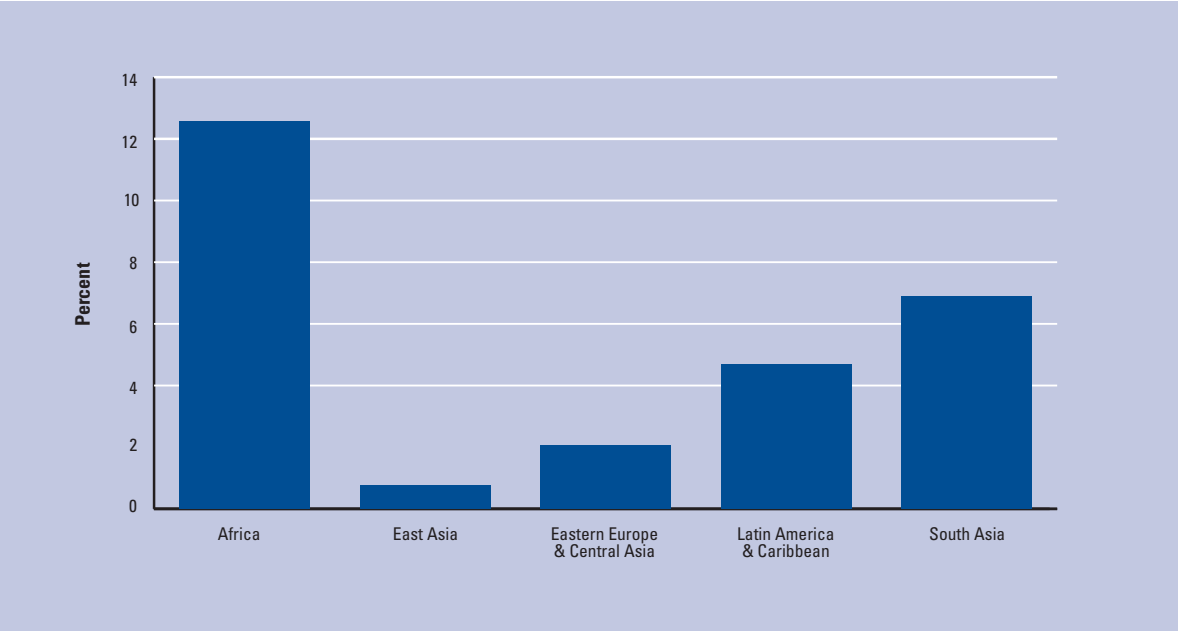
The regulatory environment is an important aspect of the business environment. A lot of micro evidence has shown that rules and regulations that are transparent and easy to interpret have a clear impact on any country's competitiveness. Consequently, when rules and regulations become burdensome they represent an obstacle, and even a cost, for firms.

There are different aspects of the regulatory environment we can look at. One is the time spent by managers in dealing with all government regulations, from taxes to licenses and inspections. This represents a clear cost since it distracts managers from the more important task of running the business. In this respect, Africa performs relatively well. In Latin American and the Caribbean—the worst of all the regions in this regard—managers spend on average over 8 percent of their time dealing with such requirements, whereas in Africa and East Asia, managers spend almost 5 percent of their time in this way. In South Asia and in Eastern Europe and Central Asia, regulations are the least burdensome—the time spent by managers is around 4 percent. Interestingly, in oil-rich countries in Africa, regulations require much more of a manager's time—almost double—while the opposite is true for landlocked countries, where regulations are less burdensome. We notice no substantial difference across firm size and exporter status.

The inability of firms to adjust their fixed costs during business cycles also generates losses that decrease their productivity and ultimately their competitiveness. One of the reasons for such incapacity is the existence of strict labor regulations—in particular, limitations on hiring or firing workers. According to the Doing Business indicators, firms in Africa face the highest level

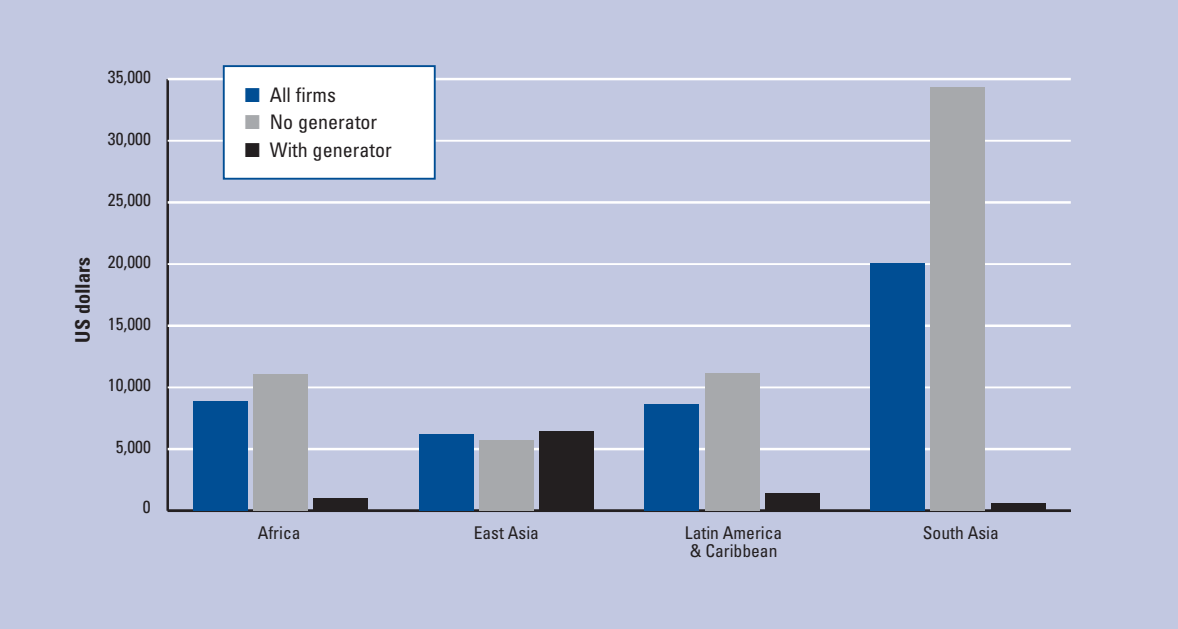
Figure 8: Burden of electricity loss: Africa vs. selected regions

8a: Share of working hours lost due to power outages



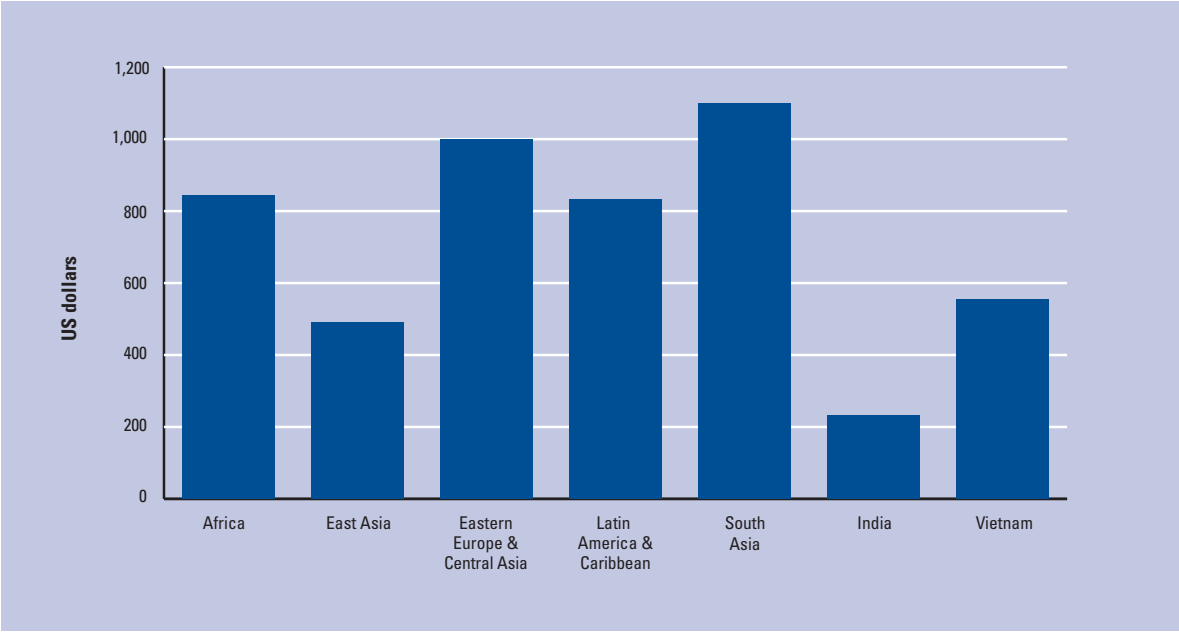
Source: Author's calculations using Enterprise Surveys (various years).

8b: Estimated electricity losses (total, with and without generator)



Source: Author's calculations using Enterprise Surveys (various years).

Figure 9: Estimated costs of inventory holding: Africa vs. selected regions and comparator countries



Source: Author's calculations using Enterprise Surveys (various years).

of difficulties in hiring and firing workers of all regions. Does this labor market rigidity have a cost implication? We attempt to quantify this cost by estimating the losses caused by an excess or shortage of staff in our sample of firms. During the Enterprise Survey interviews, managers were asked to indicate how many more (or fewer) workers they would like to hire (or shed) if there were no labor regulations preventing them from doing so. Overall we observe that the great majority of firms in most regions report having the right size workforce. Africa shows the highest share of firms with the right level of employment, followed by Latin America and the Caribbean and South Asia (see Figure 10). East Asia and Eastern Europe and Central Asia are the regions where, on the contrary, a considerable number of firms are not satisfied with their existing level of workforce.

Using this information, we estimate the cost of labor restriction as either (1) extra wages paid—in the case of excess labor—or (2) value-added lost—in the case of shortage of staff. These estimates show that the average African firm enjoys the lowest cost—after South Asia—from labor regulations, at around US$30 a month. Firms in East Asia and Latin America and the Caribbean, by comparison, lose around US$300 and US$170, respectively, a month. The highest loss from labor regulations is experienced by firms in Eastern Europe and Central Asia, where labor restrictions are most pervasive.

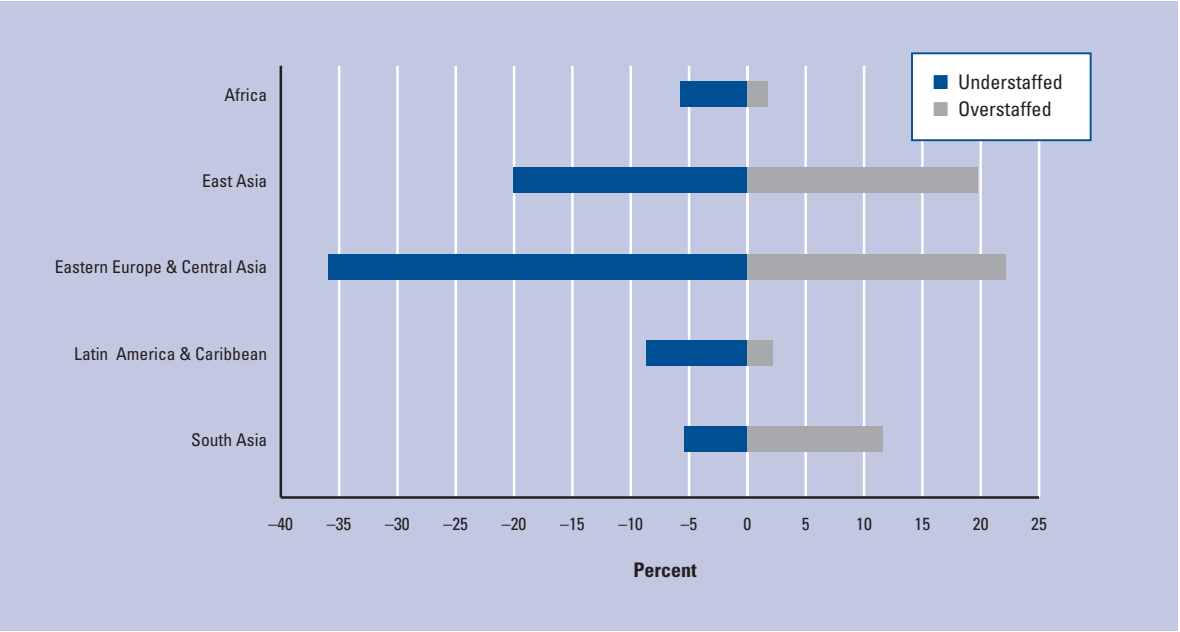
Another aspect of the regulatory environment that imposes costs on firms refers to retrenchment. When firms shed workers, they are required to pay a compensation determined by law. This cost is marginal in some cases, but it is not trivial in others, and it is higher in Africa than in all other regions. African firms are required to pay, on average, almost 1.5 years of wages when shedding labor, while the same firms in East Asia are required to pay a little over half that amount. Only firms in South Asia have the same requirement as African firms. However, in some African countries, such as in Zambia, Ghana, Sierra Leone, and Zimbabwe, firms are required to pay as much as 3 to 8 years of wages when firing a worker.

An additional important aspect of the regulatory environment that has substantial cost implications for firms is the functioning of the courts, both in enforcing contracts and in closing businesses. Uncertainty in the applicability of rules of law has been shown to impact long-term growth, at the aggregate level, and to generate second-best behavior by firms—such as establishing informal networks based on ethnicity or other personal information—at the micro level. According to the Doing Business indicators, in Africa it costs on average almost half of the value of the claim (47 percent) to go through the court process. This value is almost the same in East Asia, but much higher than in other regions, with Eastern Europe and Central Asia being the least expensive, at 24 percent of the value of the claim. In the Democratic Republic of Congo, Sierra Leone, Mozambique, Malawi, and Burkina Faso court costs are so high that they could even exceed the value of the claim itself.

Similarly, if a business fails, then the legal requirements that must be followed might make it lengthy and

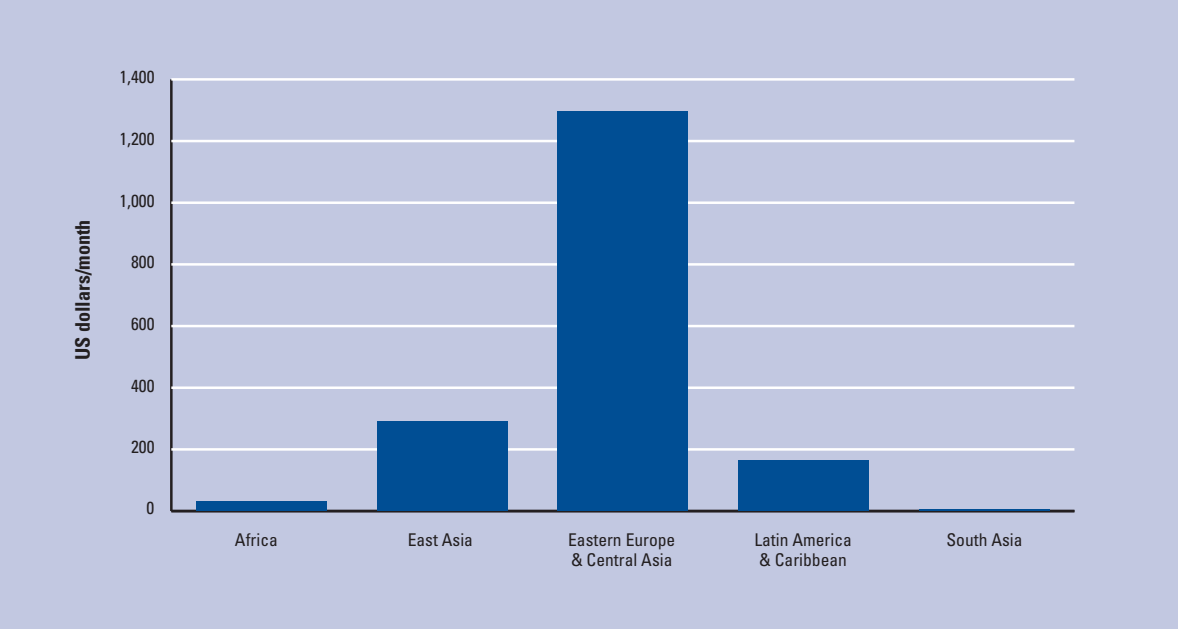
Figure 10: Costs of over- and understaffing: Africa vs. selected regions

10a: Share of firms over- and understaffed



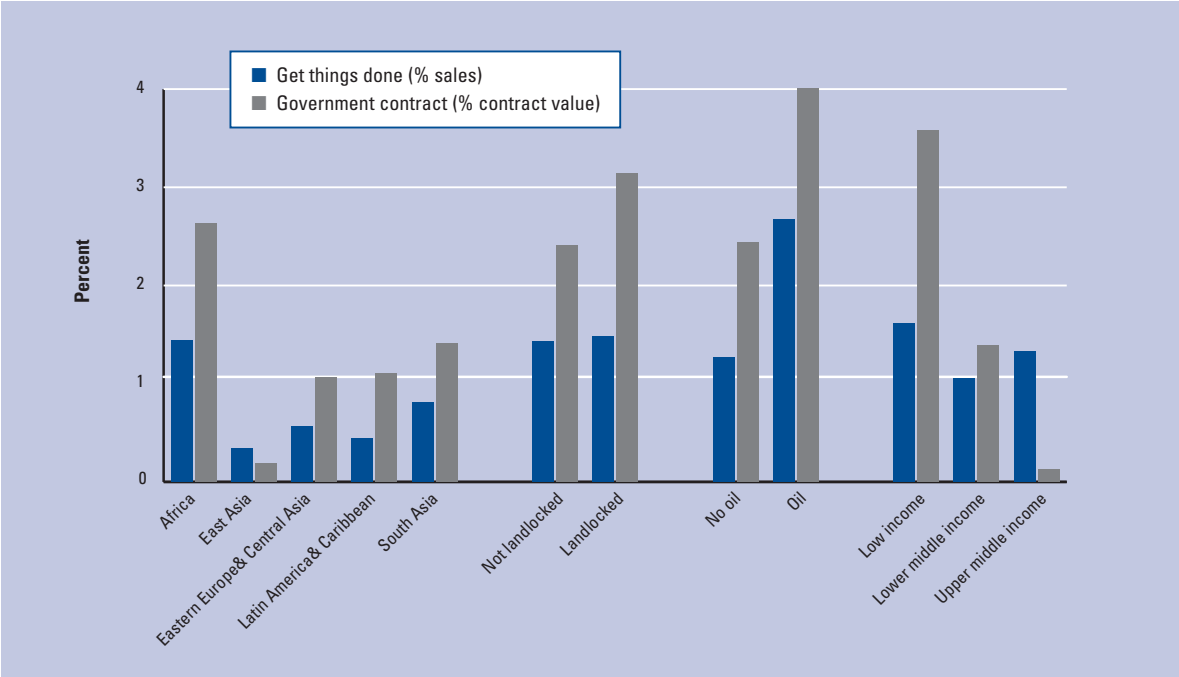
Source: Author's calculations using Enterprise Surveys (various years).

10b: Estimated cost of over- or understaffing



Source: Author's calculations using Enterprise Surveys (various years).

Figure 11: Value of corruption payments across selected regions and country characteristics, by corruption type



Source: Author's calculations using Enterprise Surveys (various years).

expensive to formally close that business. In Africa, the estimated costs of an insolvency process are high. The typical SME on the continent can expect to spend around 20 percent of the value of the estate in bankruptcy procedures. This is similar to costs in East Asia, but much higher than all other regions. Once again there is a wide variation across countries in Africa. This process can cost as little as 7 percent in Algeria, Tunisia, and Senegal or as much as 76 percent in the Central African Republic.

Losses due to corruption

African managers still place corruption among the most important constraints to their businesses. Objective data confirm such perception. Firms in Africa pay close to 1.5 percent of sales in bribes to "get things done" and close to 3 percent of the value of contract when dealing with government procurement. This is more than three times as high as what firms in East Asia pay, and more than twice the amount paid in most other regions.

The pattern of corruption across countries in Africa shows that petty corruption—to get things done—is pretty much the same across landlocked and coastal countries. However, there is a considerable difference among countries in the cost of corruption linked to government contracts (Figure 11).

Interestingly, oil-rich countries perform much worse for both types of corruption than non-oil-rich ones. Finally, the level of development has a significant impact on government procurement corruption, but not on petty corruption.

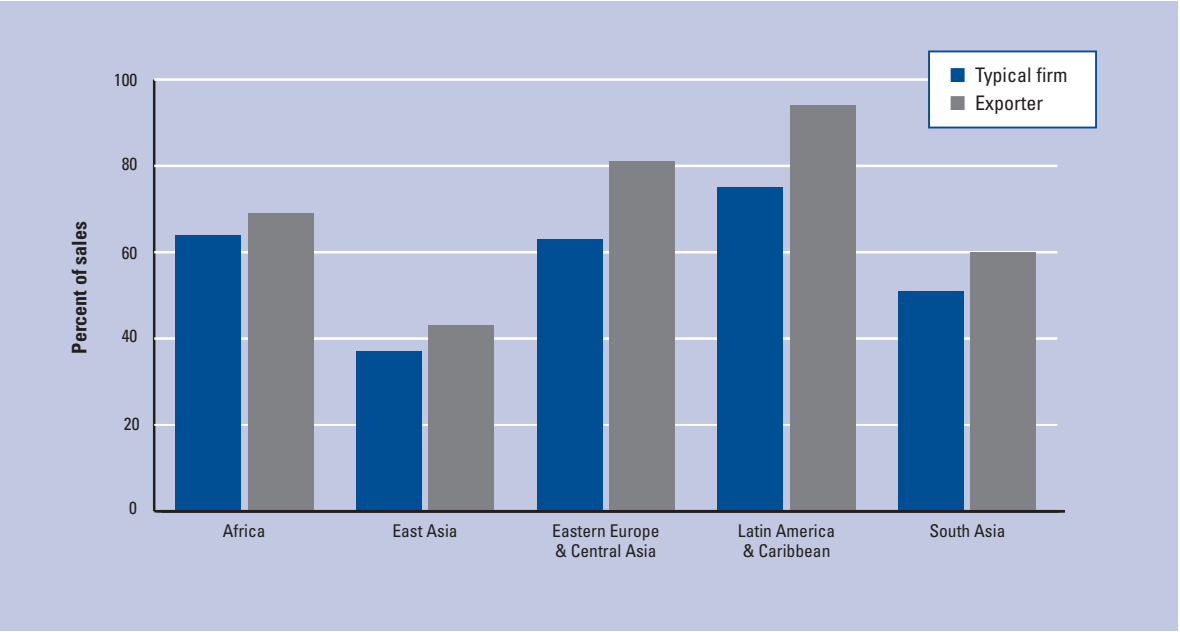
Large firms pay significantly less in bribes than small and medium firms, while domestic and nonexporters also show higher values of bribes paid than exporters and foreign firms.

Losses due to lack of security

Providing a safe environment where firms can conduct their business is a key function of any state. And yet, around the world, as much as 15 percent of firms report losses due to crime. In spite of this, a much higher share of firms (almost 60 percent) protect themselves from theft by using protection services, which adds to the cost of doing business. Interestingly, 16 percent of African firms report losses due to crime, at par with Eastern Europe and Central Asia and well above all other regions, but over half of the African firms employ private security services. Consequently, African firms spend a nontrivial amount on security services—equal to over half a percentage point of sales, which is considerably higher than East Asia or South Asia (Figure 12).

There is no significant difference in the cost of security services borne by small firms compared to medium and large ones (in terms of share of sales), nor is there a difference between foreign and domestic firms. However, exporters in Africa spend more (almost 10 percent more) than non exporters.

Figure 12: Security losses: Africa vs. selected regions



Source: Author's calculations using Enterprise Surveys (various years).

Impact of costs on Africa's competitiveness

With few notable exceptions, firm-level data seem to show that Africa is not, in nominal terms, a cost-friendly location to run a business compared to South Asia or East Asia, while it enjoys a considerable cost advantage over Eastern Europe and Central Asia and Latin American and the Caribbean. Yet, compared to these regions, we do not observe a persistent flow of investments to Africa, nor do we witness higher export growth in Africa. Why is that?

Simply looking at nominal costs does not provide an accurate picture of competitiveness. Costs need to be evaluated within a context of productivity. Therefore in this section we assess Africa's competitiveness by looking at production costs as share of sales. This will help us establish how productive and competitive African firms are in transforming inputs (costs) into outputs (sales). Table 1 presents the list and definitions of the costs taken into account. We attempted to include as many of the costs presented above as possible, estimating 14 costs divided into three categories: direct costs, indirect costs, and invisible costs.[26]

Figure 13 presents the distribution of these costs *as a share of sales* across regions. According to this figure, Africa appears to be the least competitive of all regions. For each unit of sale, African firms spend almost half of it on these costs. All other regions are much more competitive, with East Asia being almost 20 percent less expensive. The figure also shows that, for all categories of costs, Africa exhibits a comparative disadvantage with the rest of the world. Similarly, while factory floor costs (direct costs) are more comparable across regions, invisible costs are much higher in Africa than in the other regions—with the only exception of South Asia. Finally, indirect costs also contribute, although to a lesser extent, to the comparative disadvantage of African firms. The difference between Africa and the other regions on indirect costs exceeds 5 percentage points.

Figure 14 presents the three direct costs—labor, capital, and electricity—and shows that factory floor costs are to some extent similar across regions. Direct labor cost in Africa is marginally higher (2–3 percent) than in East Asia, Eastern Europe and Central Asia, and Latin American and the Caribbean. Only South Asia enjoys a 5 percent comparative labor cost advantage over Africa. Overall this is good news for Africa, especially if we take into account the fact that, as seen earlier, in nominal terms labor costs in the continent are much higher than in East Asia and South Asia. Hence we could argue that Africa's labor costs are competitive with respect to East Asia and with South Asia since, compared to these regions, Africa enjoys a much higher nominal cost advantage but a marginal disadvantage in costs as share of sales. We should, however, recall that the labor costs shown above could be underrepresented in Africa since they do not account for skills and hours worked.

The cost of capital is, on the contrary, much higher in Africa than elsewhere. This is the case even though Figure 14 shows just a 3 percent costs disadvantage for

Table 1: List and description of direct, indirect, and invisible costs

DIRECT COSTS	
Category	Description
Labor	Total compensation of workers, adjusted for temporary workers
Capital	Interest paid—using prime rate—on value of loans, estimated as value of fixed assets discounted by the value of collateral required
Electricity	Cost of electricity

INDIRECT COSTS	
Category	Description
Transport	Transportation costs
Electricity	Cost of fuel used to run generators
Telecommunications	Cost of telecommunications
Regulatory environment	Sum of (1) interest paid on bureaucratic procedures to start a business and minimum capital requirement, plus (2) cost of customs clearance times the estimated number of trips made

INVISIBLE COSTS	
Category	Description
Capital	Interest paid on additional collateral requirements
Electricity	Losses due to power interruptions estimated from reported time of interruptions
Transport	Losses due to transport delays
Regulations	Costs of managers' time spent dealing with regulations plus losses due to labor regulation rigidities
Corruption	Informal payments to get things done
Security	Costs of security measures

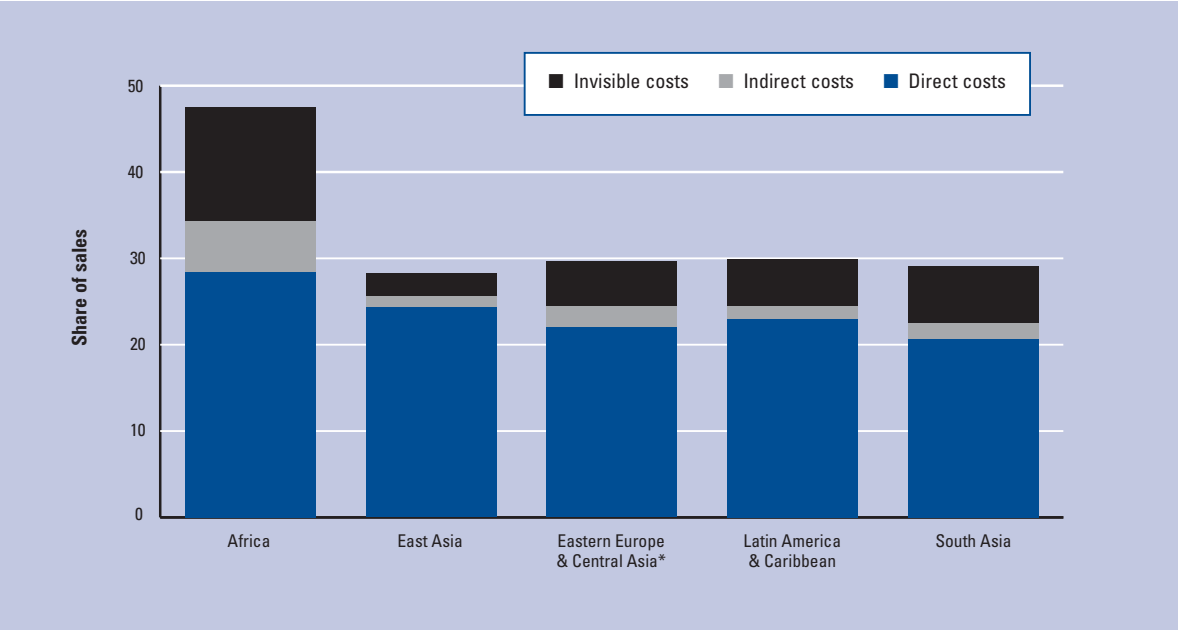
Africa. As a matter of fact, since firms in Africa enjoy a much lower access to credit, we would have expected a much lower share of sales represented by interest payments. The high relative share of such cost shows that credit is much more expensive in Africa, in line with evidence that interest rates on the continent are the highest. Finally, the direct cost of electricity appears to be the least important in comparative terms. The difference between Africa and the other regions is less than 1 percentage point.

The real obstacle to Africa's competitiveness is represented by the losses firms suffer because of the poor infrastructure services, burdensome credit market, and unpredictable regulatory environment. Figure 15 shows the incidence of each of the invisible costs on value of sales. Overall, firms in Africa lose a whopping 13 percent of sales because of these inefficiencies. That is 11 percent more than firms in East Asia and 7–8 percent more than firms in the other regions. Not surprisingly, losses due to electricity interruptions stand out as the most important invisible cost. Even though these are also significant in South Asia—especially in Pakistan—Africa is the region where firms suffer the most. This cost alone is higher than all direct cost disadvantages of African firms. Apart from South Asia—where losses are estimated at about 4 percent—no other region loses more than one-quarter of what Africa loses because of energy unreliability. Second, losses due to credit requirements—that is, excessive collateral requirements as defined in this chapter—are equally important. African firms lose almost 4 percent of sales just to provide collateral *in excess* of what the median firm provides. This is more than four times what firms in East Asia and South Asia experience, and more than twice that of firms in other regions. Corruption remains an important cost for firms in the continent, amounting to over 1 percent of sales—more than half of what other regions pay. Finally, poor transportation and lack of security are also important costs, although they account for less than 1 percent of sales. As seen earlier, labor restrictions are not a major cost for African entrepreneurs (Figure 15).

If we take the cost shares as indicators of competitiveness, overall Africa is 19 percent less competitive than East Asia and 18 percent less competitive than South Asia. The great majority of such competitive disadvantage is the result of what we define as *invisible costs.* Such losses are, in fact, 11 percent higher in Africa than in East Asia, with the remaining cost differential almost equally distributed between direct and indirect costs. These are substantial and significant cost disadvantages.

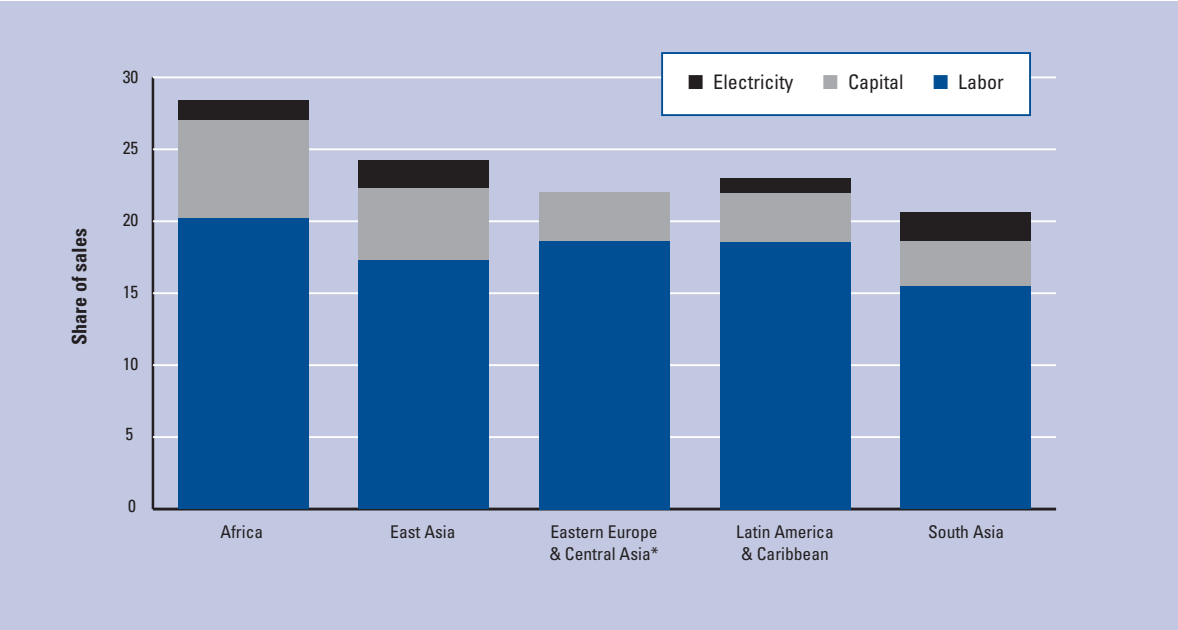
When we look at the distribution of costs across firm types—exporters, domestic, and so on—we observe that Africa has the highest level of overall costs, but we do not always see that invisible costs account for most of the continent's cost disadvantage. An interesting finding is represented by the notable differences in cost structure between non exporters and exporters. While in the first group the pattern presented above persists, for exporters the pattern is reversed. As a matter of fact, contrary to non exporters, for exporters direct costs are more important than invisible costs. As Figure 16 shows, exporters in Africa experience 11 percent higher costs than in East Asia, but most of this difference (7 percent) is the result of direct costs—more specifically, of labor and capital costs. On the other hand, if we look at the cost structure of nonexporters, African firms incur 18

Figure 13: Estimated direct, indirect, and invisible costs across selected regions



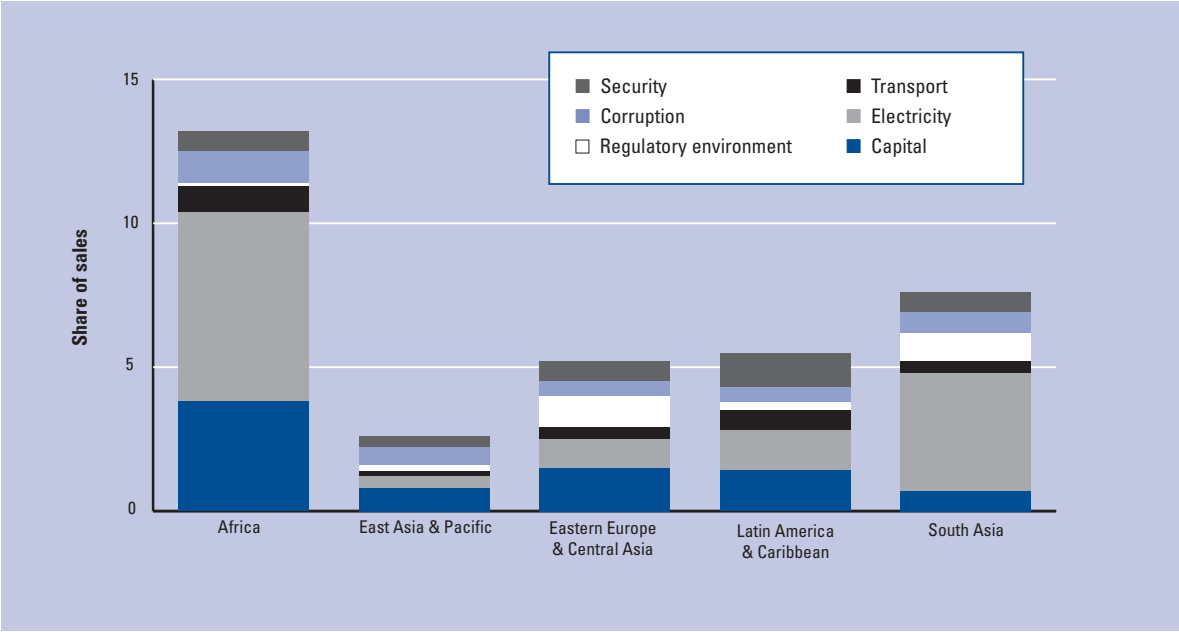
Source: Author's calculations using Enterprise Surveys (various years); World Bank, 2008.
*Electricity costs not available.

Figure 14: Composition of estimated direct costs across selected regions



Source: Author's calculations using Enterprise Surveys (various years).
*Electricity costs not available.

Figure 15: Composition of estimated invisible costs across selected regions



Source: Author's calculations using Enterprise Surveys (various years) and World Bank, 2008.
Note: *Regulatory environment* includes time spent by manager and losses due to labor regulations.

percent higher costs than similar firms in East Asia, with invisible costs being the major component of such disadvantage (11 percent).

On the other hand, we observe a significant variation across countries in Africa. This confirms what we saw earlier when we looked at nominal costs. Figure 17 shows two interesting patterns.[27] First, it shows the wide variation of costs across firms in Africa. It is relatively less costly to produce in Algeria, Egypt, Morocco, Botswana, South Africa, Namibia, and Kenya; these countries are viable competitors of major international countries, such as Brazil, Thailand, or Vietnam. It is twice as expensive to produce in Nigeria, however. Second, the main comparative disadvantage of African firms is represented by invisible costs. Comparatively direct costs in Africa are higher than they are for the major competitors, but not nearly as high as invisible costs.

Conclusions and policy implications

Based on firm-level data, this chapter has presented evidence that Africa is not a cost-friendly location to conduct business. For each unit of sales realized, African firms spend almost half of it in costs, as much as 19 percent more than firms in other regions.

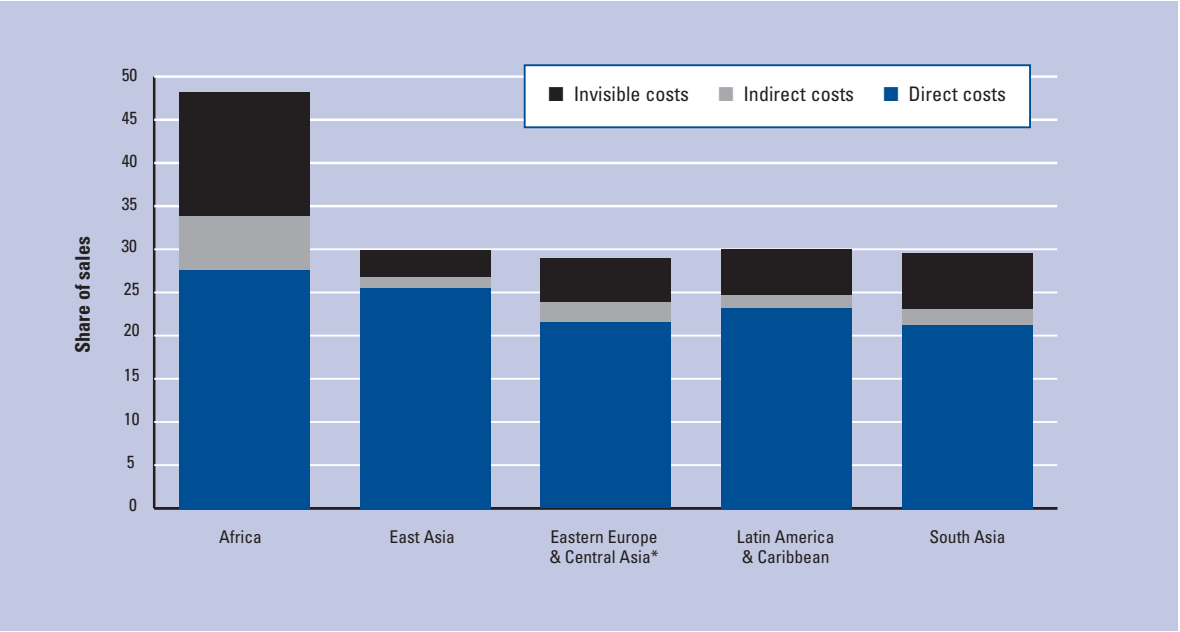
If we look at the main production costs, we can see that the most important comparative disadvantage for African firms is represented by costs of capital and electricity. African firms suffer two disadvantages in terms of access to credit: first, they pay a higher interest rate, and second, they are also required to post higher collateral. These barriers not only limit the ability of firms to obtain credit but also imply a higher cost of finance. As a consequence, African firms lose an estimated 11 percent of sales a year. Equally important is electricity. The total cost of electricity for African firms is estimated at more than 10 percent of sales—4 percent because of the actual cost and 6 percent from losses caused by power interruptions. The third set of bottlenecks affecting Africa's competitiveness is transport, corruption, and the regulatory environment. Together these account for over 5 percent of sales and are important not only for existing firms but primarily for SMEs and for entry into the formal sector (Figure 18).

Policy implications

The evidence presented in this chapter provides some hierarchy to a number of bottlenecks to the emergence of a competitive private sector in Africa: the high cost and lack of access to credit, the poor quality of infrastructure services, and lack of a transparent and friendly regulatory environment. A number of initiatives are ongoing on all these fronts, from the New Partnership for Africa's Development (NEPAD)'s Infrastructure Investment Facility and the World Bank's Sustainable Infrastructure Action Plan to the Doing Business reforms. However, the global economic crisis is likely to exacerbate these bottlenecks, so renewed action is warranted to ensure that Africa's competitiveness remains at the forefront of the policy agenda on the continent. Within this

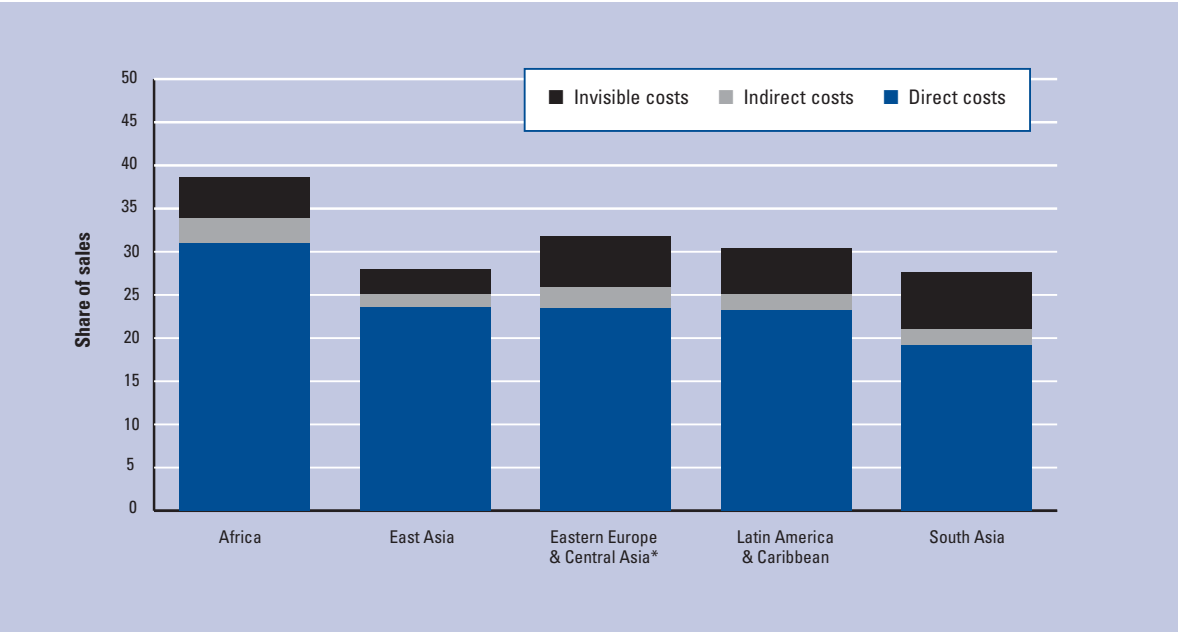
Figure 16: Estimated direct, indirect, and invisible costs across selected regions, by export status

16a: Nonexporters



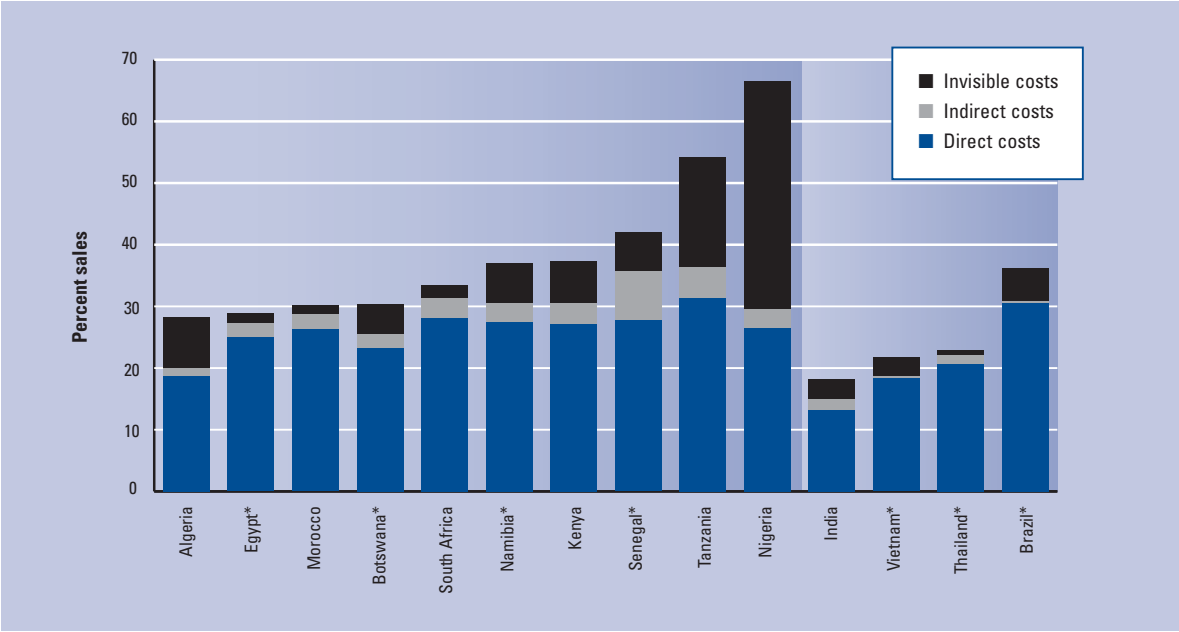
Source: Author's calculations using Enterprise Surveys (various years) and World Bank, 2008.
*Electricity costs not available.

16b: Exporters



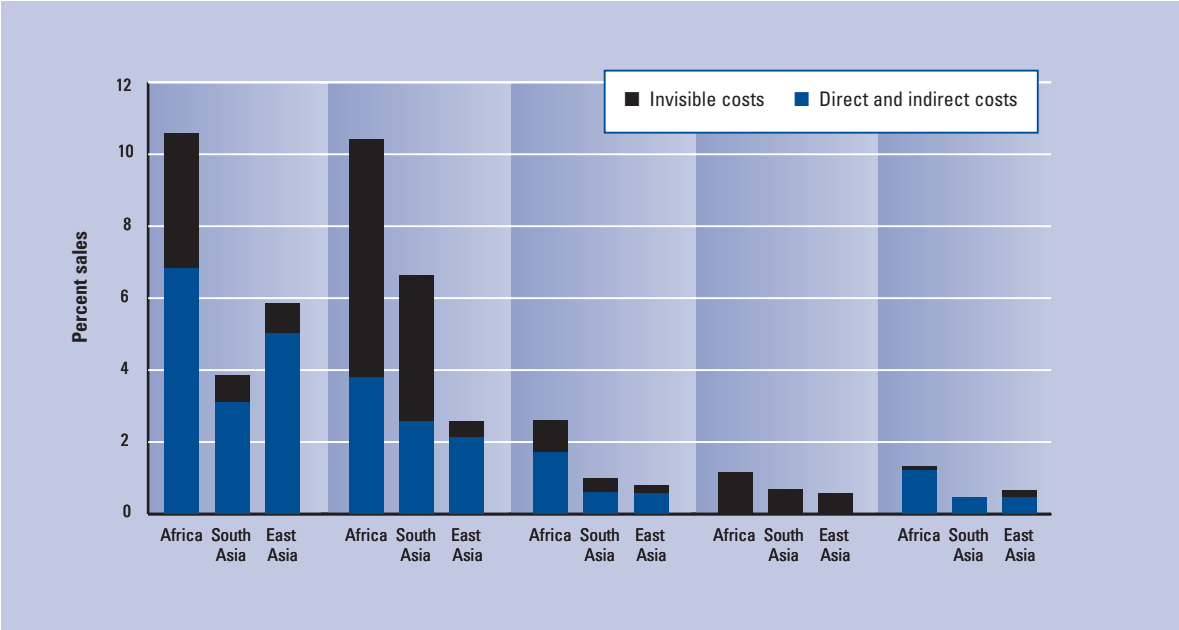
Source: Author's calculations using Enterprise Surveys (various years) and World Bank, 2008.
*Electricity costs not available.

Figure 17: Cross-country comparison of estimated costs: Africa and major comparator countries



Source: Author's calculations using Enterprise Surveys (various years) and World Bank, 2008.
*Countries with a few missing costs (see list in endnote 27)

Figure 18: Magnitude of estimated production costs in Africa, East and South Asia



Source: Author's calculations using Enterprise Surveys (various years) and World Bank, 2008.

framework, the following policy recommendations are offered.

Finance. Objective evidence presented in this chapter confirms the well-established fact that firms in Africa lack access to, and pay higher costs for, credit. Access is particularly limited for SMEs. Not many commercial banks do SME-banking in Africa, and the global financial crisis is likely to reduce even further access to finance for SMEs in the years to come. Hence African governments need to implement new policies to increase access to credit for firms, especially SMEs. This can be achieved in three ways. First, scale up support for SME financing by providing partial credit guarantees to financial institutions already involved in SME financing. This approach will benefit those firms that do not have access to the banking system. By sharing the credit risk, governments will expand access to finance to SMEs that are not otherwise able to get credit and will help reduce the cost of financing.

This approach, however, must be accompanied by initiatives aimed at developing the capacity of financial institutions to assess credit worthiness and to enhance the recipients' capabilities to obtain and properly manage the additional financial resources. Furthermore, for those firms that already have access to the banking system, the government should adopt excess collateral guarantee schemes whose goal is to guarantee the value of additional collateral requested by banks above a certain norm (e.g., the median value). This will increase access to credit, especially in Africa. Finally, for those firms that cannot post collateral, policies aimed at improving the financial management literacy should be adopted. This will improve the ability of firms—especially micro firms with little knowledge of how to prepare a business plan—to properly apply for loans and to manage finances.

Electricity. Development is strongly associated with an increasing reliance on energy production, supply, transport, and usage. Consequently, a relentless improvement of energy policies is needed in Africa if long-term growth is to be sustained. Furthermore, the recent spike in energy prices has highlighted the fact that energy businesses are increasingly global in nature, while energy policies are predominantly made at the national level. This circumstance calls for African nations to apply consistent and coherent energy policies in order for energy businesses to receive clear and stable policy signals to invest in new technology, infrastructure, and products.

With respect to energy, Africa suffers from a complex set of challenges: geographic—the existence of plenty of resources but with poor access (often called *energy poverty*); affordability—a very limited possibility for cross-subsidizing energy costs; and capacity—a limited ability to bring in investments and technology. These challenges need to be addressed especially through the harmonization of donors and country interventions, and by not only bringing in investments and managerial capability but also creating the right environment.

With a dismal record on electrification, Africa needs to improve its generation and distribution systems. A number of countries have taken concrete steps in this direction, but there is room for more action. The opening of generation, transmission, and distribution must be accompanied by proper institutional and legal frameworks. Creating the legal environment for private investment through an appropriate legal framework, institutional framework, access to adequate and accurate information, and security is essential. Also governments should encourage large investors and SMEs to invest privately or through public-private partnerships (PPPs) in electrification through co-generation projects, mergers of small projects to bring economies of scale, and co-operative arrangement. Governments should be wary, however, that although there is no single ideal policy to adopt, the sequencing of reforms is important to ensure that energy is available to all. In particular, the establishment of structures and mechanisms for increased electrification in rural areas ought to be in place before large-scale reforms such as privatization are initiated.

Finally, the enormous potential of renewable energy sources (especially hydroelectric and solar) should be exploited. This has the potential to make Africa not only a major producer but a net exporter of energy. According to some estimates, 17 countries in Africa are among the top 35 nations with the biggest total reserves of solar, wind, hydro, and geothermal energy. Most of Africa receives solar radiation of the order of 6–8 kilowatt hours per meters squared per day—some of the highest levels in the world—placing 31 African countries in the top 35 countries on the planet. And power generation from renewable sources can be cost-effective. A recent study concluded that renewable energy is more economical than conventional power energy for off-grid generation of less than 5 kilowatts—exactly the sort of power needed by the majority of African users.[28]

Transport. Addressing the transport problem in Africa requires action on two fronts: infrastructures and regulations. Creating a major road network in Africa has been advocated since 2006. Between South Africa and Nigeria—the two largest economies on the continent—there is virtually no overland shipment, mostly because of the very poor road quality in transit countries such as the Democratic Republic of Congo. Yet such a network would generate an estimated expansion of overland trade by about US$250 billion in 15 years, with both direct and indirect benefits for Africa's rural poor. Furthermore, road construction is labor intensive and would also help improve road safety—Africa has a very high road death rate per vehicle. On the other hand, high transport costs in Africa are mainly the result of a lack of competition in the trucking industry. Consequently, without proper deregulation of trucking services, prices will remain high and firms will not ben-

efit from the investment in road rehabilitation. In West and Central Africa, this strategy is most warranted. There cartels should be abolished and the tax structure should reward those who operate more modern vehicles and utilize them more intensively. Finally, deregulation should also facilitate new entrants' access to freight. In East Africa and the Southern African road network, lower transport costs can be achieved through improvements in some critical road sections. Similarly, the establishment of one-stop border posts would reduce delays and would help achieve lower transport prices. Finally, in East Africa it might be appropriate to lower fuel taxes in landlocked countries so that domestic trucking operators are not disadvantaged against coastal countries' operators.[29]

Corruption. Too many African nations remain at the bottom ranks in indicators of corruption. Firm-level data confirm that corruption remains a major problem for entrepreneurs on the continent. Tackling corruption is not an easy or a short process. It requires political will, popular support, and necessary resources. Hence governments throughout Africa need first to clearly and unequivocally declare their political will to fight corruption at the very top level. Second, they will have to allocate the necessary resources to the fight—more specifically, they need to assign at least 0.5 percent of the national budget permanently to this battle. Third, they need to establish an anti-corruption agency, recruit investigators and staff, and define a clear mandate. Finally, they need to develop and support an anti-corruption campaign to build popular support.

Regulatory environment. With almost 30 countries implementing close to 60 reforms in 2008, Africa has demonstrated that it is a region recognizing the value of regulatory reforms. Botswana, Burkina Faso, Rwanda, Senegal, and Tunisia—just to mention some—all topped the charts of reformers last year. And Mauritius joined the top 25 on the ease of doing business after years of reforms. All this notwithstanding, Africa remains the region with the lowest comparative ranking on the quality of its regulatory environment. Clearly more needs to be done. Entrepreneurs in Africa still face a burdensome regulatory environment, particularly in regard to trading across borders, starting a business, and registering property. Although it takes only 8–9 procedures to clear customs—at par with most regions in the world—the time these procedures involve in Africa is much longer than it is in the rest of the world. There it takes, in fact, on average 35–40 days to complete these procedures, one-third more than in East Asia. Similarly, starting a business in Africa takes some 10 procedures and approximately 45 days, which is slightly higher than in most regions. Where Africa stands out as an unfriendly location, however, is with respect to the cost of procedures and the minimum capital requirement. These costs in Africa are three to four times higher than in other regions. Finally, another area of reform is property registration. Here again, although the number of procedures and duration is in line with other parts of the world, the costs are much higher in Africa.[30]

Notes

1 World Bank 2005.

2 Eifert et al. 2008.

3 Eifert et al. 2008.

4 World Bank Investment Climate Assessments, various years.

5 MIGA 2006b; Eifert et al. 2008.

6 A great deal of work has been done in analyzing different factors of the business environment and their impact on firm performance. Not as much evidence, however, exists on detailed production costs.

7 The great majority of Enterprise Surveys were conducted in the 2005–08 period. See appendix Table A1 for a detailed list of countries included and year of data collection. Measures were taken to account for outliers. Note that not all variables are available for all countries; hence, to avoid results being driven by small samples, we dropped any variable with fewer than 15 observations in a particular country.

8 MIGA 2006b. The nine countries covered are Ghana, Kenya, Lesotho, Madagascar, Mali, Mozambique, Senegal, Tanzania, and Uganda.

9 Labor cost is adjusted for temporary workers by estimating the full-time equivalent of temporary workers.

10 Available data do not allow us to adjust for hours worked; hence the real gap would probably be larger.

11 Available data do not allow us to adjust for skills. Hence the real gap would probably be larger.

12 Data are not available for all countries.

13 We use these data because of data availability—the Enterprise Survey data have few observations on interest rates. In the analysis, we use three-year averages (to account for the fact that loans are generally long term).

14 Since we do not have data in producer price indices we cannot estimate real interest rates. For this reason we prefer to present the spread in nominal interest rates across regions rather than the absolute values.

15 Firm sizes are defined as follows: a *small* firm has less than 25 employees, a *medium* firm has between 25 and 150 employees, and a *large* firm has more than 150. This definition is applied to all countries and aims mainly at dividing the sample equally.

16 Data refer to 2006, which is the year with the highest number of observations. These figures exclude Burkina Faso, where electricity costs a whopping US$0.23/kWh.

17 This estimation is based on a small sample of three oil-rich countries and four landlocked ones

18 The reader should keep in mind that the discussion in this paragraph refers to firms fully complying with tax laws and regulations (as per the Doing Business methodology).

19 See World Bank 2008.

20 In South Asia and Latin America and the Caribbean, it costs around US$350 and US$2,200, respectively, to start a business.

21 In other words, we estimate the cost of the additional collateral above the median as if the firms had to borrow that additional collateral amount—and pay interest on it—in order to obtain the loan. To determine the value of collateral, we use the value of fixed assets, since that is most often accepted as collateral.

22 *The New York Times* 2007.

23 When estimating the losses associated with power outages, we use the sales lost (proportional to the time of lost production) for those firms that do not have a generator and the cost of a generator for those that have one. We therefore assume that each firm will incur only one of the two losses and that firms with a generator do not experience sales losses due to power outages. Furthermore, the cost of a generator is estimated as the interest paid on the cost of a generator, using the prime rate. Finally, because the cost of a generator was not asked in the survey, we impute its cost by using the energy intensity of sales and imputing the corresponding generator cost. See appendix Table A3 for the costs and capacities of generators.

24 Only in East Asia are the losses for firms with a generator higher than the losses for firms without a generator. This is because firms in East Asia own much larger generators.

25 Eastern Europe and Central Asia is not shown for lack of data on ownership of generators. The high values for South Asia are driven mainly by Pakistan.

26 For a more detailed description of these costs, assumptions, and data sources, see appendix Table A2.

27 Some countries did not report all costs. Missing costs are: for Botswana and Namibia, fuel; for Brazil, transport, fuel, telecommunications, and bribes; for Egypt, regulations (invisible costs) and security; for Senegal, excess labor; for Thailand, transport, fuel, and telecommunications.

28 Buys et al. 2007; Karekezi et al. 2004; Karekezi et al. 2005; Ramachandran et al. 2009; World Bank 2006.

29 Buys et al. 2006; Teravaninthorn and Raballand 2009.

30 World Bank 2008.

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Appendix A

Table A1: Number of observations by country and region

Country/Region	Year	Number of countries	Number of observations
Algeria	2007		590
Angola	2006		424
Benin	2004		178
Botswana	2006		339
Burkina Faso	2006		49
Burundi	2006		270
Cameroon	2006		119
Cape Verde	2006		47
Democratic Republic of Congo	2006		339
Egypt	2006		995
Ethiopia	2006		460
Gambia	2006		171
Ghana	2007		494
Guinea-Bissau	2006		159
Guinea-Conakry	2006		223
Kenya	2007		657
Madagascar	2005		279
Malawi	2005		157
Mali	2007		490
Mauritania	2006		235
Mauritius	2008		321
Morocco	2007		470
Mozambique	2007		479
Namibia	2006		327
Nigeria	2007		1,888
Rwanda	2006		212
Senegal	2007		505
South Africa	2007		937
Swaziland	2006		306
Tanzania	2006		417
Uganda	2006		561
Zambia	2007		484
Africa		32	13,582
East Asia		9	17,936
Eastern Europe & Central Asia		30	9,124
Latin America & Caribbean		18	12,195
South Asia		4	4,618
TOTAL		**93**	**57,455**

Note: **East Asia** includes Cambodia, China, Indonesia, Laos, Malaysia, Philippines, Korea, Rep., Thailand, and Vietnam. **Eastern Europe & Central Asia** includes Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Rep., Estonia, Former Yugoslav Republic of Macedonia, Georgia, Hungary, Kazakhstan, Kosovo, Kyrgyzstan, Latvia, Lithuania, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Tajikistan, Turkey, Ukraine, Uzbekistan and Yugoslavia. **Latin America & Caribbean** includes Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela. **South Asia** includes Bangladesh, India, Pakistan and Sri Lanka.

Appendix A *(Cont'd.)*

Table A2: Description, assumptions, and sources of cost calculations

Cost type	Cost category	Description	Assumptions	Source
DIRECT	Labor	Total compensation of workers, adjusted for temporary workers	—	Enterprise Surveys, various years
	Capital	Interest paid—using prime rate—on value of loans, estimated as value of fixed assets discounted by the value of collateral required	All firms pay an interest rate equal to the prime rate to account for a low response rate. Furthermore, since access to finance is often reported as one of the most common constraints and fixed assets as the most common form of collateral, we assume that the value of debt is equal to the value of fixed assets discounted by the value of collateral (for example, if the value of collateral is 200 percent of the loan, then the value of borrowing is equal to half the value of fixed assets). Only firms with loans are included.	Enterprise Surveys and World Development Indicators, various years
	Electricity	Cost of electricity	—	Enterprise Surveys, various years
INDIRECT	Transport	Transportation costs	—	Enterprise Surveys, various years
	Electricity	Cost of fuel used to run generators	We take the difference between the fuel costs of firms with generators and those without generators as fuel costs used to run the generator.	Enterprise Surveys, various years
	Telecommunications	Cost of telecommunications	—	Enterprise Surveys, various years
	Regulatory environment	Sum of (1) interest paid on the costs of bureaucratic procedures to start a business and minimum capital requirement, plus (2) cost of custom clearance times the estimated number of trips	(1) All firms pay an interest rate equal to the prime rate. (2) The cost of bureaucratic procedures is assumed equal to the interest cost on expenses to start a business. (3) The number of trips is estimated assuming that goods are exported/imported via a 40-foot container holding US$115,000 worth of merchandise. (Note: This shipment value assumption generates estimated costs of transport very close to the actual transportation costs reported by firms in the few countries where both data are available.)	Doing Business indicators 2009 and World Development Indicators
INVISIBLE	Capital	Interest paid on additional collateral requirements	(1) All firms pay an interest rate equal to the prime rate. (2) For firms with collateral value above the country's median, the "additional" cost of financing is estimated as the interest cost on the collateral above median value—same assumeption as before on the value of loans (see above). For those firms with value of collateral below the median, the additional cost is set to zero.	Enterprise Surveys and World Development Indicators, various years
	Electricity	Losses due to power interruptions estimated from reported time of interruptions	—	Enterprise Surveys, various years
	Transport	Losses due to transport delays	—	Enterprise Surveys, various years
	Regulations	Costs of manager time spent on dealing with regulations plus losses due to labor regulations rigidities	To account for unavailability of data, we multiply the average labor cost by a factor estimated from those countries that reported wage costs for managers (controlling for region and size of firms)	Enterprise Surveys, various years
	Corruption	Informal payments to "get things done"	—	Enterprise Surveys, various years
	Security	Costs of security measures	—	Enterprise Surveys, various years

Appendix A *(Cont'd.)*

Table A3: Price of generators (US dollars)

Generator price (US$)	Power generated (kilowatts)	Total kilowatts generated* (annual)
2,490	8	21,600
2,520	10	27,000
2,550	12	32,400
2,840	16	43,200
2,960	20	54,000
3,080	24	64,800
3,130	30	81,000
3,540	40	108,000
4,120	50	135,000
5,470	75	202,500
5,660	90	243,000
5,710	100	270,000
6,690	120	324,000
8,200	150	405,000
10,925	160	432,000
12,806	200	540,000
14,183	250	675,000
16,311	300	810,000
17,470	320	864,000
23,300	350	945,000
27,464	400	1,080,000
28,690	440	1,188,000
34,950	500	1,350,000
37,116	540	1,458,000
62,282	640	1,728,000
62,976	720	1,944,000
64,682	800	2,160,000
69,989	900	2,430,000
106,278	1000	2,700,000
149,000	1250	3,375,000
255,000	1500	4,050,000
229,000	1750	4,725,000
375,000	2000	5,400,000
495,000	2250	6,075,000

*Total annual power generated assumes that each generator works 300 days/year, 9 hours/day.

CHAPTER 1.5

Enhancing Trade in Africa: Lessons from the Enabling Trade Index

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The recent report published by the Commission on Growth and Development identifies engagement with the global economy as one of the key factors contributing to economic growth.[1] In most countries that achieved high growth after World War II, both exports and imports grew more rapidly than GDP. This is not surprising. The benefits of trade are well known: it raises income through specialization, increased competition, and the exploitation of economies of scale. It increases the variety of products and services available in the market and promotes technological innovation. In addition, trade is often associated with better governance and economic policies, as competition to attract investment exerts discipline on policymakers. Recent studies also indicate that trade, particularly in agricultural products, can lead to significant poverty reduction. Despite these clear advantages, many countries protect their markets from imports because dismantling trade barriers, although positive for the country on balance over time, produces both political winners and losers within the country. Some also use infant industry protection when other policy instruments to promote growth are not available.

The reduction in traditional trade barriers such as tariffs and quotas over the past several decades was one of the drivers of the growth in goods trade that has contributed considerably to global growth and poverty reduction. As these barriers came down, other costs that impede trade became more apparent. These transaction costs are related to the steps an exporter or importer must take in order to have goods delivered. They include obtaining information on markets and entry requirements, administrative procedures to ensure compliance with rules and regulations in the target market, and transport or clearance by customs and other border agencies. As formal trade barriers came down, more attention was also given to costs imposed by business environments that were not conducive to trade because of weak governance, widespread corruption, underdeveloped institutions, and weak market structures. Another reason why these transaction costs have received additional attention in recent years is that the intensification of global trade linkages has been based on supply chains that span many countries (in some cases even the entire globe); this in turn has raised the importance of the transaction costs for international businesses. Just-in-time production gained ground and production cycles shortened so that the velocity of getting goods to market and the security of supply became increasingly important determinants of business competitiveness.

On a global scale, transaction costs are unequally distributed. They affect to a greater extent developing countries that are often less well connected to international transport and communications routes and often have less efficient public institutions and governance systems. Recognizing the role trade transaction costs play for trade in developing countries, members of the World Trade Organization (WTO) included trade

facilitation in the Doha Round negotiations (see Box 1). The aim of these negotiations is to assist developing countries in adopting better practices that will enable them to move goods across borders more efficiently.[2] The focus is placed on providing countries with technical and financial assistance to implement the necessary reforms and make appropriate investments. Although these proposals are firmly backed by a majority of the negotiating parties, the uncertainty related to the completion of the Doha Round could postpone or even impede an agreement on this front as well. While the G20 nations have pledged to avoid increased protectionism and to bring the Doha Round to a conclusion, there is a danger that the current economic crisis could delay completion of the Round, as protectionist pressures continue to mount in the United States and Europe as well as in many developing countries.[3] In this context, the resurgence of economic nationalism could harm developing countries disproportionately, both through increased protectionism in export markets as well as at home, and because of the forgone benefits from the Doha Round in general and the trade facilitation package in particular.

Trade in Africa

Despite many initiatives to liberalize and promote trade, the African continent has not participated fully in the growth of global trade over the past decades. The share of Africa's exports fell from 7.4 percent in 1948 to about 3 percent in 2007 (see Figure 1), and the share of imports has fallen by the same order of magnitude.

Many factors are said to contribute to this performance. Their endowments of minerals and land have led many African countries to specialize in primary commodity exports, and although high commodity prices in recent years have helped boost African trade shares, over the long run the overall share of commodities in world trade has declined. African agriculture has also been disadvantaged by protectionist barriers and farm subsidies common in industrial countries. At the same time, African entry into manufactured exports has been weak. At-home efforts to protect some domestic producers have disadvantaged others. Abroad, African producers have problems meeting complex technical and sanitary requirements. Although developed countries have provided many African countries with trade preferences, these have often been accompanied by rules of origin that have proved difficult or impossible for African producers to meet. These difficulties are indicative of more general supply-side constraints that lower Africa's ability to export manufactured goods. High trade costs raise input and equipment prices, and low development levels are associated with weak domestic supply bases. As a result, producers seeking to export manufactured goods often face difficulties in obtaining key inputs and complementary services.

Box 1: The framework for trade facilitation

To date, there is no generally agreed upon definition of *trade facilitation,* and the term is used in many contexts in the literature and by trade practitioners. The WTO defines *trade facilitation* broadly as "Removing obstacles to the movement of goods across borders." In its most narrow sense, trade facilitation addresses the logistics of moving goods across borders, which includes the efficiency of transport infrastructure, documentation, and the overall administrative procedures associated with cross-border trade. The term is sometimes broadened to include the environment in which trade transactions take place, such as the transparency of customs and border agencies, as well as the issue of harmonization of standards and conformity with international regulations and sometimes also trade finance.

Acknowledging that substantial gains could be realized by removing these obstacles to trade, WTO members decided to include trade facilitation as a subject to be negotiated in the Doha Round, following the Cancun ministerial meeting in 2004. The mandate includes the following three objectives for the trade facilitation negotiations:[1]

1. To reduce transaction costs of trade by clarifying and improving the rules on the movement, release, and clearance of goods. Here the negotiations mainly cover transparency about requirements and procedures and the provision of advance rulings—such as those about tariff classification and customs valuation; the ability to challenge customs decisions, fees, and formalities; and common standards for documentation, to name a few examples. A related goal is to facilitate transit traffic for landlocked countries.

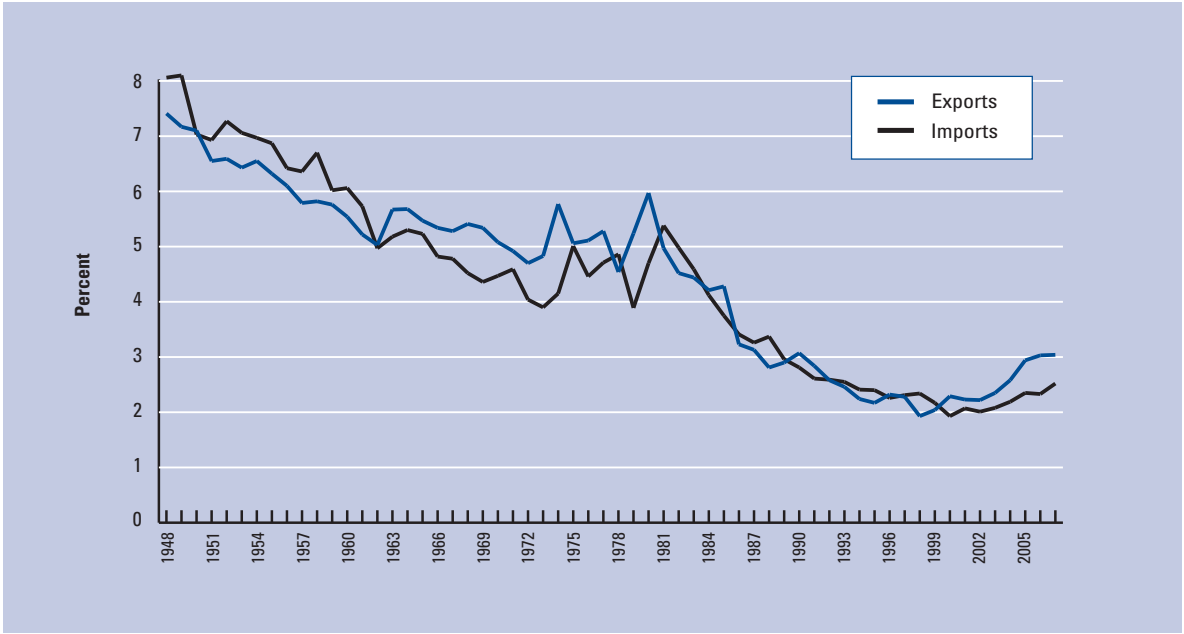
2. To allow for special provisions for developing countries and provide them with support in the implementation of practices and policies in the area of trade facilitation. These provisions include support for low-income countries during the process of negotiations in trade facilitation, but also support during negotiations through capacity building and technical assistance.

3. To enhance communication and cooperation between the customs agencies of member countries.

Note

1 See Eglin 2008.

Figure 1: Share of Africa's exports and imports in world trade, 1948–2008



Source: WTO, 2009.

Geography also plays a role. Many African countries have poor neighbors and are distant from their major export markets. To be sure, geography need not be destiny—but it does require investment in transportation, infrastructure, and telecommunications that has not been forthcoming. In addition, lack of competition in transportation services raises costs.

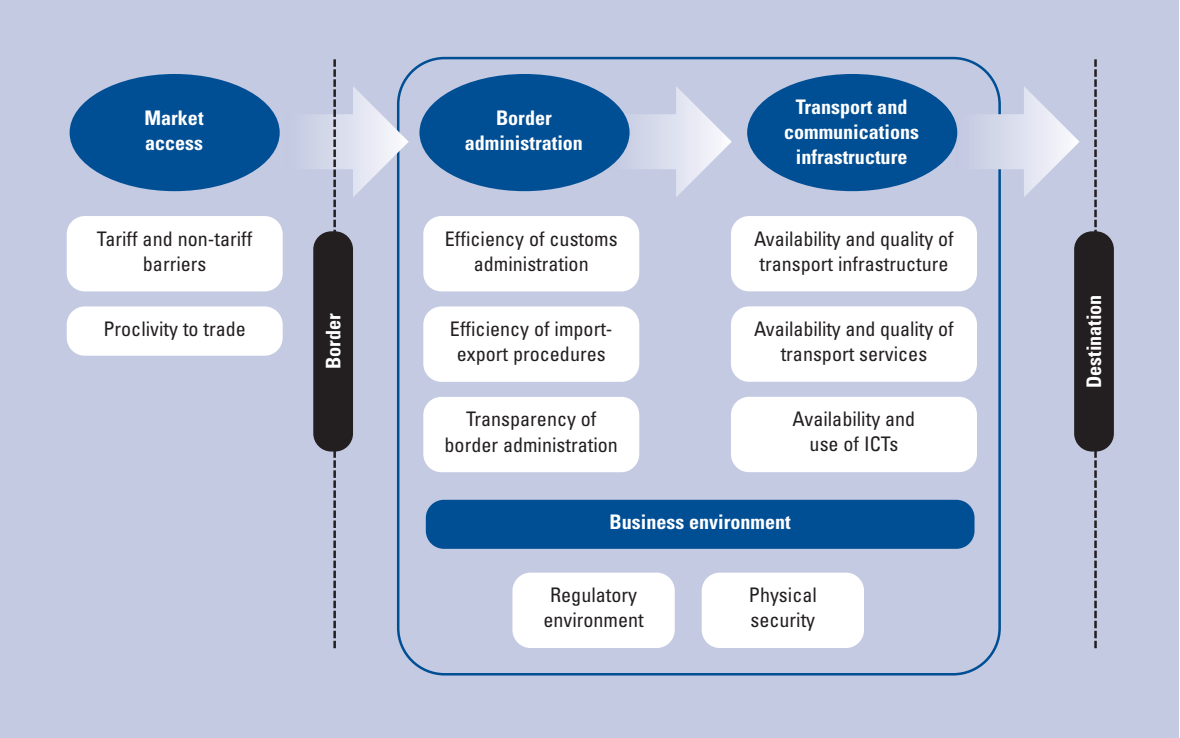
It is no surprise that recent empirical studies find that transportation costs across all categories are significantly higher for African countries than for other developing regions.[4] For example, according to the United Nations Conference on Trade and Development (UNCTAD), while freight costs for the world on average amount to 5.4 percent of imports, this value is up to five times higher for some African countries.[5] In landlocked Mali, for example, freight costs amount to 24.4 percent of the value; in Uganda, 17.4 percent; and in Zambia 10.9 percent. The average cost to export a standard container from Africa in 2007 was US$1,649, nearly double the Organisation for Economic Co-operation and Development (OECD) average of US$889.[6]

Poor policies and institutions—some specific to trade such as customs and regulations, and others that influence trade such as weak governance and rule of law, a poor business environment, high levels of corruption, and weak public safety—also play an important role. The combination of poor infrastructure and weak institutions appears to interact, with serious implications for both the time and cost of transporting exports and imports. Djankov et al. estimate, for example, that if the Central African Republic reduced its factory-to-ship time from 116 to 27 days (the median of the sample of countries they examine) exports would nearly double.[7]

In addition to its longer-term impact on development, fostering trade will be key for mitigating the effect of the present global recession on growth rates in Africa. The global crisis is putting additional challenges on African policymakers. The backlash to globalization puts pressures on leaders worldwide to protect domestic companies. Yet, if implemented, protectionist measures will further reduce growth rates in African countries. Many countries pledged to avoid protectionism, but domestic political pressures can easily overturn such commitments. Proposals aimed at resisting the attempts to introduce protectionist barriers include encouraging transparency. Governments should commit to clearly disclose the measures taken, with their rationale as well as their expected duration. Such measures will encourage similar practices and avoid retaliatory action.[8]

Under the current circumstances, developing trade in Africa will be constrained by falling prices for commodities, which still make up a large share of African exports. Other constraints include declining overall trade volumes and shortages in trade finance, which affects developing countries more than others. These conditions will make competition in global markets more intense, and only the most efficient producers will be able to maintain their competitive edge. In this context, improvements to the trade facilitation framework could contribute to reducing the cost of exporting and of

Figure 2: Composition of the four subindexes of the ETI



Source: Lawrence et al., 2008.

increasing diversification into manufactures. In addition to the direct effect on trade, investment in trade facilitation in the current environment could have other advantages. Investment in infrastructure, for example, could provide stimulus to the country's economy; streamlining customs would improve the efficiency of fiscal revenue collection, thereby improving the ability of the government to respond to crises.

A number of studies have assessed trade policy and trade costs and analyzed their implications on trade in Africa,[9] but, to our knowledge, a comprehensive benchmarking exercise across a large number of relevant factors has not been undertaken for African countries to date. The present chapter analyzes the numerous factors that affect trade in African economies using the results of the World Economic Forum's Enabling Trade Index. The aim is to shed some light on the relative importance of the different types of trade barriers in Africa when compared with other regions and to highlight the relative strengths and weaknesses of the individual countries. This analysis will provide a basis for identifying priorities for action in order to enable African countries to further benefit from international trade. Following a description of the Index instrument, the present chapter analyzes the performance of the African continent and compares it with two relevant regions, Latin America and South East Asia (ASEAN members). Comparisons with other countries, such as the large emerging markets of Brazil, Russia, India, and China (BRIC countries) are made whenever applicable. The remainder of the chapter analyzes the individual performance of the 25 African countries covered by the study.[10]

The Enabling Trade Index

The Enabling Trade Index (ETI) was initiated within the context of the World Economic Forum's Industry Partnership Programme for the Logistics and Transport Sector and was first published in *The Global Enabling Trade Report 2008*. The Index was developed in close collaboration with a number of data partners: the Global Express Association, the International Air Transport Association (IATA), the International Trade Centre (ITC), UNCTAD, the World Bank, and WTO. Important feedback has also been received from a number of key companies that are industry partners in the effort, namely Agility, Deutsche Post, Dubai Port World, FedEx Corporation, Geopost Intercontinental, Prologis, Stena AB, TNT N.V., UPS, and World Net.

The ETI is a comprehensive index that measures *the factors, policies and services facilitating the free flow of goods over borders and to destination*.[11] The structure of the Index, presented in Figure 2 breaks the enablers into four overall issue areas, or subindexes: (1) market access,

(2) border administration, (3) transport and communications infrastructure, and (4) the business environment. The first subindex measures the extent to which the policy and cultural framework of the country welcomes foreign goods into the country. The second subindex assesses the extent to which the administration at the border facilitates their entry. The third subindex takes into account whether the country has the transport and communications infrastructure necessary to facilitate the movement of the goods from the border to destination. Finally, the fourth subindex looks at the overarching regulatory and security environment impacting the transport of goods within the country.

Each of these four subindexes is composed in turn of a number of pillars of enabling trade, of which there are 10 in all.[12] These are:

1. Tariffs and non-tariff barriers
2. Proclivity to trade
3. Efficiency of customs administration
4. Efficiency of import-export procedures
5. Transparency of border administration
6. Availability and quality of transport infrastructure
7. Availability and quality of transport services
8. Availability and use of ICTs
9. Regulatory environment
10. Physical security

Each of these pillars is, in turn, made up of a number of individual variables. The dataset includes both hard data and survey data from the World Economic Forum's Executive Opinion Survey (Survey).[13] The hard data were obtained from publicly available sources, international organizations, and trade experts (for example, the World Bank, IATA, the ITC, the WTO, and UNCTAD). The Survey is carried out among CEOs and top business leaders in all economies covered by our research. The Survey provides unique data on many qualitative institutional and business environment related issues, as well as a number of specific issues related to trade.

The 10 pillars are regrouped into the four subindexes described above by calculating simple averages, and the overall score for each country is derived as an unweighted average of the four subindexes. The details of the composition of the ETI are shown in Appendix A; Appendix B provides detailed information on each indicator of that Index.

The overall Index covers 118 countries, selected according to data availability, across all continents and levels of development; of these, 25 African countries have been included in this *Report*.

Table 1: Enabling Trade Index ranking for Africa, 2008

Country/Economy	Rank/25	Rank/118	Score
Mauritius	1	40	4.50
Tunisia	2	49	4.23
South Africa	3	59	3.98
Morocco	4	74	3.71
Namibia	5	77	3.66
Uganda	6	79	3.63
Zambia	7	85	3.52
Kenya	8	86	3.51
Egypt	9	87	3.51
Madagascar	10	88	3.49
Mali	11	90	3.42
Cameroon	12	92	3.42
Lesotho	13	95	3.36
Mauritania	14	97	3.34
Benin	15	98	3.34
Burkina Faso	16	99	3.33
Senegal	17	100	3.33
Mozambique	18	101	3.30
Tanzania	19	112	3.27
Ethiopia	20	106	3.06
Algeria	21	108	3.04
Nigeria	22	111	3.02
Zimbabwe	23	112	2.98
Burundi	24	117	2.70
Chad	25	118	2.60
Africa			3.80
North Africa			3.80
Sub-Saharan Africa			3.90
ASEAN			4.61
Latin America and the Caribbean			3.79

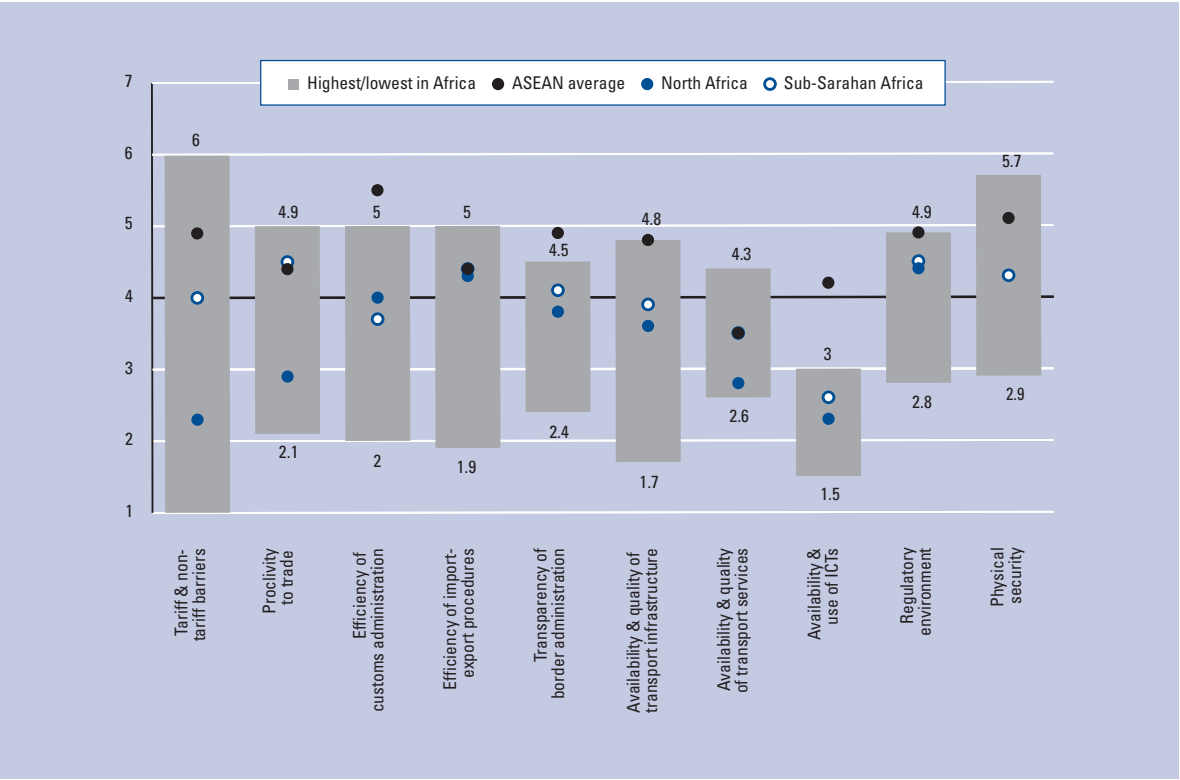
Source: World Economic Forum, 2008 and authors' calculations.

Lessons from the Enabling Trade Index for Africa

Among the 118 economies covered by *The Global Enabling Trade Report* (GETR), African countries—with the exception of the three best performers in the region—occupy rankings in the bottom half of the sample, and more than half are in the lowest quartile.[14] These poor results point to significant impediments to trading across borders in most countries on the continent. The best-performing African country in the ETI is Mauritius, followed by Tunisia and South Africa. Table 1 shows the ranking of the 25 African countries covered by this study in regional and global comparison.

The ETI results show that the African continent is by no means homogenous with respect to the factors enabling trade, yet the level of diversity differs from one issue area to another. Figure 3 shows the diversity of performance of African countries across the 10 pillars of the ETI. The highest disparities among African countries can be observed with respect to the first pillar, tariff and non-tariff barriers, where Africa's levels of protectionism range from among the lowest to the highest in the world. As Table 2 shows, Algeria is the most protected country in Africa and Lesotho is the least protected. In general, trade policies are significantly more liberal in sub-Saharan

Figure 3: African performance on the 10 pillars of the ETI, 2008



Source: World Economic Forum, 2008 and authors' calculations.

economies than in northern Africa (see Figure 3). At the same time, both subregions are, on average, less open than ASEAN countries.

Considerable disparities exist also with respect to the efficiency of border administration. And although the efficiency of export and import procedures in the two subregions is in line with ASEAN members' performance, transparency and the efficiency of customs are areas that will need to be addressed. Border administration is an issue of particular importance for the continent, as many landlocked countries in Africa depend on the efficiency of this administration in the transit countries. For example, even if Uganda has fairly efficient customs clearance processes in place, clearance and transport time will be slowed down by the less-efficient Kenyan or Tanzanian customs. Border efficiency in Africa is therefore an issue that needs to be dealt with at a regional level in addition to national efforts. It has, therefore, often been the subject of many bilateral agreements (e.g., between Uganda and Kenya) or even regional agreements, such as the South African Customs Union (SACU) or the Western African Union (WAU). Although numerous regional agreements in Africa have addressed the transit issue, the outcomes on the ground often remain below expectations.

The area in which African countries show the most homogeneous performance is also the one where they lag behind most significantly: the availability and use of ICTs. The comparison with ASEAN members highlights the gap in ICT development in Africa and the need for further investment in this area to enable businesses to better take advantage of the global economy. Even the best-performing African country, Mauritius, comes in far behind the ASEAN average, and more than half of the countries place in the lowest quartile of the entire sample. One important reason for this weak performance is the lag in electrification in Africa, which is a necessary pre-requisite to improving the use of ICTs. At the same time, although fairly large disparities exist, the regulatory environment for transport companies and the security environment are assessed relatively positively on the continent. Tables 2 through 5 show the performance of African countries on the individual pillars.

As mentioned above, the two areas of the ETI that stand out for their high disparity among African countries are market access and border administration. These are also two areas where reform efforts have been ongoing over recent years as part of wider trade liberalization packages. The detailed data contained in the ETI allow for a more thorough analysis and can inform policy-making on the continent. Trade policy and the quality

Table 2: The Enabling Trade Index: Market access

			PILLARS			
	MARKET ACCESS		Tariff and non-tariff barriers		Proclivity to trade	
Country/ Economy	Rank	Score	Rank	Score	Rank	Score
Algeria	25	1.80	25	1.00	21	2.59
Benin	16	3.36	14	3.87	17	2.86
Burkina Faso	11	3.82	5	4.82	19	2.83
Burundi	23	2.20	19	2.34	25	2.06
Cameroon	12	3.58	11	3.99	14	3.17
Chad	18	3.03	13	3.94	24	2.12
Egypt	22	2.51	24	1.00	4	4.03
Ethiopia	24	2.15	20	2.04	23	2.26
Kenya	4	4.32	12	3.97	2	4.67
Lesotho	2	4.45	1	6.04	18	2.86
Madagascar	3	4.42	3	5.25	10	3.60
Mali	7	4.01	6	4.79	13	3.22
Mauritania	15	3.39	15	3.81	16	2.96
Mauritius	1	5.29	2	5.93	3	4.65
Morocco	21	2.58	22	1.91	12	3.26
Mozambique	10	3.85	4	5.18	22	2.52
Namibia	9	3.93	8	4.56	11	3.29
Nigeria	19	2.77	23	1.80	7	3.74
Senegal	20	2.59	21	2.03	15	3.16
South Africa	6	4.10	17	3.28	1	4.92
Tanzania	17	3.07	18	2.46	8	3.67
Tunisia	13	3.57	16	3.38	6	3.76
Uganda	5	4.27	7	4.78	5	3.77
Zambia	8	3.98	9	4.35	9	3.61
Zimbabwe	14	3.44	10	4.14	20	2.75
Africa average		3.87		3.56		4.18
North Africa		2.63		2.26		2.85
Sub-Saharan Africa		4.27		4.04		4.53
ASEAN		4.76		4.87		4.40
Latin America and the Caribbean		3.79		3.55		4.03

Source: World Economic Forum, 2008 and authors' calculations.

Table 3: The Enabling Trade Index: Border administration

			PILLARS					
	BORDER ADMINIS-TRATION		Efficiency of customs administration		Efficiency of import-export procedures		Transparency of border administration	
Country/ Economy	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Algeria	8	3.34	19	2.56	10	3.88	6	3.59
Benin	11	3.27	15	2.79	9	3.93	16	3.08
Burkina Faso	21	2.76	14	2.80	20	2.19	10	3.30
Burundi	22	2.70	17	2.74	24	2.00	8	3.37
Cameroon	7	3.43	7	3.48	7	4.07	23	2.73
Chad	25	2.16	25	2.00	22	2.06	25	2.41
Egypt	5	3.78	9	3.07	3	4.82	7	3.45
Ethiopia	15	3.12	8	3.09	19	2.99	11	3.29
Kenya	14	3.13	10	2.96	15	3.63	20	2.80
Lesotho	16	3.03	24	2.22	11	3.83	18	3.05
Madagascar	17	3.01	23	2.22	17	3.46	9	3.35
Mali	23	2.68	18	2.63	21	2.14	12	3.26
Mauritania	19	2.95	22	2.29	16	3.49	17	3.06
Mauritius	2	4.53	3	4.43	1	5.00	3	4.15
Morocco	3	4.32	1	4.98	5	4.25	5	3.73
Mozambique	9	3.30	11	2.93	13	3.76	14	3.20
Namibia	6	3.59	13	2.88	8	3.97	4	3.91
Nigeria	18	2.98	21	2.38	12	3.79	21	2.78
Senegal	13	3.18	16	2.77	14	3.64	15	3.14
South Africa	4	4.21	5	3.76	4	4.33	1	4.54
Tanzania	10	3.28	20	2.47	6	4.15	13	3.21
Tunisia	1	4.73	2	4.77	2	4.96	2	4.45
Uganda	12	3.26	6	3.69	18	3.15	19	2.96
Zambia	20	2.88	4	3.95	23	2.04	24	2.64
Zimbabwe	24	2.51	12	2.90	25	1.88	22	2.76
Africa		4.02		3.70		4.38		3.98
North Africa		4.11		3.97		4.34		3.79
Sub-Saharan Africa		4.04		3.74		4.40		4.05
ASEAN		3.89		5.50		4.36		4.88
Latin America and the Caribbean		3.83		3.46		4.38		3.64

Source: World Economic Forum, 2008 and authors' calculations.

of border administration are covered by the first five pillars of the Index.

The first pillar captures two variables that measure the level of protectionism: tariffs and non-tariff measures. Tariffs are measured as the average rate of duty per imported value unit weighted by the value of reference group imports of the particular good.[15] The second variable in this pillar is the index of non-tariff barriers (NTBs), which is composed of two variables—the share of tariff lines affected by non-tariff measures (NTMs) and the average number of NTMs per tariff line.[16] Table 6 shows the results of African countries on the trade policy–related variables of the ETI.

The results show that African countries tend to use tariffs more extensively than most other regions. The average weighted tariff for African countries amounts to 10.5 percent, while the overall sample average is only 6.8 percent. Although North African countries significantly liberalized their economies and trade policy over the past decade, the level of tariffs remains high throughout the region. North African countries impose higher tariffs than their sub-Saharan neighbors and are above international standards. For example, Moroccan tariffs, which are the lowest in the subregion, amount to 12.7 percent. Additionally, all countries bar Tunisia use NTMs quite extensively. Sub-Saharan countries, on the

Table 4: The Enabling Trade Index: Transport and communications infrastructure

	TRANSPORT AND COMMUNICATIONS INFRASTRUCTURE		PILLARS: Availability and quality of transport infrastructure		Availability and quality of transport services		Availability and use of ICTs	
Country/ Economy	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Algeria	9	2.85	7	3.46	23	2.69	5	2.41
Benin	15	2.57	18	2.50	5	3.32	12	1.89
Burkina Faso	19	2.40	20	2.45	13	3.02	18	1.75
Burundi	24	2.14	24	2.00	18	2.88	23	1.56
Cameroon	21	2.37	21	2.44	17	2.88	16	1.79
Chad	25	1.93	25	1.70	25	2.57	24	1.54
Egypt	4	3.27	5	3.89	2	3.64	6	2.29
Ethiopia	12	2.69	11	3.33	9	3.22	25	1.52
Kenya	8	2.86	9	3.41	11	3.14	10	2.03
Lesotho	23	2.25	23	2.01	14	3.01	20	1.72
Madagascar	16	2.47	13	2.86	21	2.74	14	1.80
Mali	18	2.44	22	2.23	6	3.32	17	1.78
Mauritania	13	2.62	19	2.45	8	3.26	8	2.16
Mauritius	3	3.50	2	4.53	15	3.00	1	2.99
Morocco	5	3.20	6	3.84	10	3.17	4	2.59
Mozambique	22	2.29	17	2.56	24	2.68	22	1.62
Namibia	6	3.17	1	4.75	22	2.73	9	2.03
Nigeria	17	2.44	15	2.57	19	2.82	11	1.94
Senegal	7	2.86	8	3.42	16	2.95	7	2.22
South Africa	1	3.74	4	4.12	1	4.35	3	2.77
Tanzania	20	2.40	14	2.65	20	2.75	15	1.80
Tunisia	2	3.53	3	4.27	3	3.51	2	2.81
Uganda	10	2.75	12	3.13	4	3.41	21	1.70
Zambia	14	2.59	16	2.57	7	3.30	13	1.89
Zimbabwe	11	2.73	10	3.35	12	3.11	19	1.73
Africa		3.29		3.84		3.47		2.55
North Africa		3.21		3.57		2.76		2.34
Sub-Saharan Africa		3.41		3.89		3.55		2.57
ASEAN		4.85		4.78		3.48		4.19
Latin America and the Caribbean		3.27		3.57		3.30		2.93

Source: World Economic Forum, 2008 and authors' calculations.

Table 5: The Enabling Trade Index: Business environment

	BUSINESS ENVIRONMENT		PILLARS: Regulatory environment		Physical security	
Country/Economy	Rank	Score	Rank	Score	Rank	Score
Algeria	14	4.16	21	3.75	9	4.58
Benin	15	4.16	17	4.02	12	4.31
Burkina Faso	9	4.35	12	4.18	10	4.51
Burundi	21	3.74	23	3.73	17	3.76
Cameroon	12	4.28	8	4.36	14	4.20
Chad	24	3.30	24	3.68	25	2.91
Egypt	7	4.47	11	4.27	7	4.66
Ethiopia	11	4.29	19	3.91	6	4.67
Kenya	22	3.73	14	4.12	23	3.34
Lesotho	23	3.71	22	3.73	18	3.68
Madagascar	16	4.05	16	4.06	16	4.03
Mali	6	4.54	10	4.30	5	4.79
Mauritania	8	4.41	13	4.16	8	4.65
Mauritius	3	4.69	7	4.38	2	5.00
Morocco	2	4.74	6	4.49	3	4.99
Mozambique	20	3.76	18	3.99	22	3.52
Namibia	17	3.95	20	3.86	15	4.04
Nigeria	19	3.87	3	4.62	24	3.11
Senegal	4	4.67	5	4.51	4	4.83
South Africa	18	3.87	15	4.12	21	3.62
Tanzania	10	4.32	9	4.34	13	4.30
Tunisia	1	5.11	4	4.53	1	5.68
Uganda	13	4.25	2	4.84	20	3.66
Zambia	5	4.65	1	4.88	11	4.42
Zimbabwe	25	3.22	25	2.78	19	3.67
Africa		4.33		4.29		4.37
North Africa		4.34		4.41		5.22
Sub-Saharan Africa		4.35		4.51		4.32
ASEAN		4.96		4.85		5.07
Latin America and the Caribbean		4.29		5.02		3.57

Source: World Economic Forum, 2008 and authors' calculations.

other hand, show high disparity in terms of restrictiveness of trade policy and the instruments they use. While a few countries make extensive use of NTMs (Tanzania, Senegal, and South Africa), most African countries have only a few non-tariff measures in place. These are, however, in most cases complemented by fairly high tariffs. The low use of NTMs is not surprising given that standards related to product safety, sanitary or phytosanitary measures, and environmental and labor standards that constitute an important share of NTMs tend to be more developed in industrial countries.

The reform of border administration has been on top of the agenda of policymakers as well as bilateral and multilateral donors over the past several years in Africa as well as in other developing regions. And a number of African countries have reformed their customs administrations in order to improve the collection of revenues and reduce illicit trade (Ghana, Mozambique, Uganda, and Zambia are just a few examples). These efforts certainly contribute to the relatively good results obtained by African countries in comparison with other regions.[17] In terms of the efficiency of overall border administration, Africa on average performs better than ASEAN members and Latin America (see Table 3). In particular, North Africa obtains relatively good results across all related indicators. More specifically, in terms

Table 6: Selected indicators of market access

Country/Economy	Tariff barriers imports (weighted tariffs, percent)	Non-tariff barriers (index on a scale of 0–100)	Share of duty-free (percent of total imports)
Algeria	15.6	85.3	5.6
Benin	7.8	n/a	12.7
Burkina Faso	9.9	5.0	22.1
Burundi	11.6	n/a	16.4
Cameroon	14.1	4.5	6.4
Chad	14.7	2.8	12.3
Egypt	21.8	97.8	30.2
Ethiopia	12.4	n/a	20.2
Kenya	7.6	n/a	68.1
Lesotho	4.2	3.0	20.6
Madagascar	8.4	2.0	52.9
Mali	9.9	5.6	32.4
Mauritania	8.0	n/a	13.7
Mauritius	3.6	8.0	86.2
Morocco	12.7	59.4	7.3
Mozambique	7.7	6.5	17.8
Namibia	8.5	17.2	56.9
Nigeria	13.0	n/a	17.7
Senegal	9.8	99.5	8.6
South Africa	6.2	58.1	63.1
Tanzania	7.7	94.6	52.3
Tunisia	16.8	14.5	25.6
Uganda	11.1	0.1	55.8
Zambia	11.6	7.7	66.6
Zimbabwe	13.0	6.3	4.3
ETI sample average	6.8	37.6	50.4
ETI sample minimum	0.0	0.1	0.0
ETI sample maximum	25.0	99.5	100.0
Africa average	10.5	27.3	28.5
Africa minimum	0.0	0.1	4.3
Africa maximum	21.8	99.5	86.2

Source: World Economic Forum, 2008 and author's calculations.

Table 7: Selected indicators of the efficiency of border administration

Country/Economy	Burden of customs procedures (scale of 1–7)	Customs services index (scale of 0–11.5)	Effectiveness and efficiency of clearance (scale of 1–5)	Time for import (days)	Documents for import (number)	Cost to import (US$)
Algeria	2.7	3.7	1.6	23.0	9.0	1,378
Benin	3.1	3.8	1.8	41.0	7.0	1,202
Burkina Faso	3.9	2.7	2.1	54.0	11.0	3,522
Burundi	2.7	n/a	2.2	71.0	10.0	3,705
Cameroon	3.0	5.8	2.6	33.0	8.0	1,529
Chad	2.0	n/a	2.0	102.0	9.0	5,520
Egypt	3.7	3.7	2.1	18.0	7.0	729
Ethiopia	3.4	4.2	2.1	42.0	8.0	2,793
Kenya	3.3	4.0	2.3	37.0	8.0	1,995
Lesotho	2.7	2.7	2.4	49.0	8.0	1,210
Madagascar	3.0	2.3	2.2	49.0	10.0	1,282
Mali	3.8	2.3	2.2	65.0	11.0	2,680
Mauritania	3.5	1.8	2.4	42.0	11.0	1,363
Mauritius	4.5	6.5	2.0	16.0	6.0	673
Morocco	4.4	8.2	2.2	19.0	11.0	800
Mozambique	2.9	n/a	2.2	38.0	10.0	1,185
Namibia	3.8	3.0	2.1	24.0	9.0	1,550
Nigeria	2.8	3.0	2.2	46.0	9.0	1,047
Senegal	2.9	4.0	2.4	26.0	11.0	1,720
South Africa	3.8	n/a	3.2	35.0	9.0	1,195
Tanzania	3.0	3.0	2.1	30.0	7.0	1,425
Tunisia	4.8	n/a	2.8	22.0	7.0	810
Uganda	3.3	6.0	2.2	37.0	7.0	2,990
Zambia	3.4	6.7	2.1	64.0	11.0	2,840
Zimbabwe	2.8	4.5	1.9	67.0	13.0	2,420
ETI sample average	3.9	5.7	2.7	27.1	7.6	1,338
ETI sample minimum	2.0	1.7	1.6	3.0	3.0	367
ETI sample maximum	6.4	10.2	4.0	104.0	14.0	5,520
Africa average	3.3	4.1	2.2	42.0	9.1	1,902.5
Africa minimum	2.0	1.8	1.6	16.0	6.0	673.0
Africa maximum	4.8	8.2	3.2	102.0	13.0	5,520.0

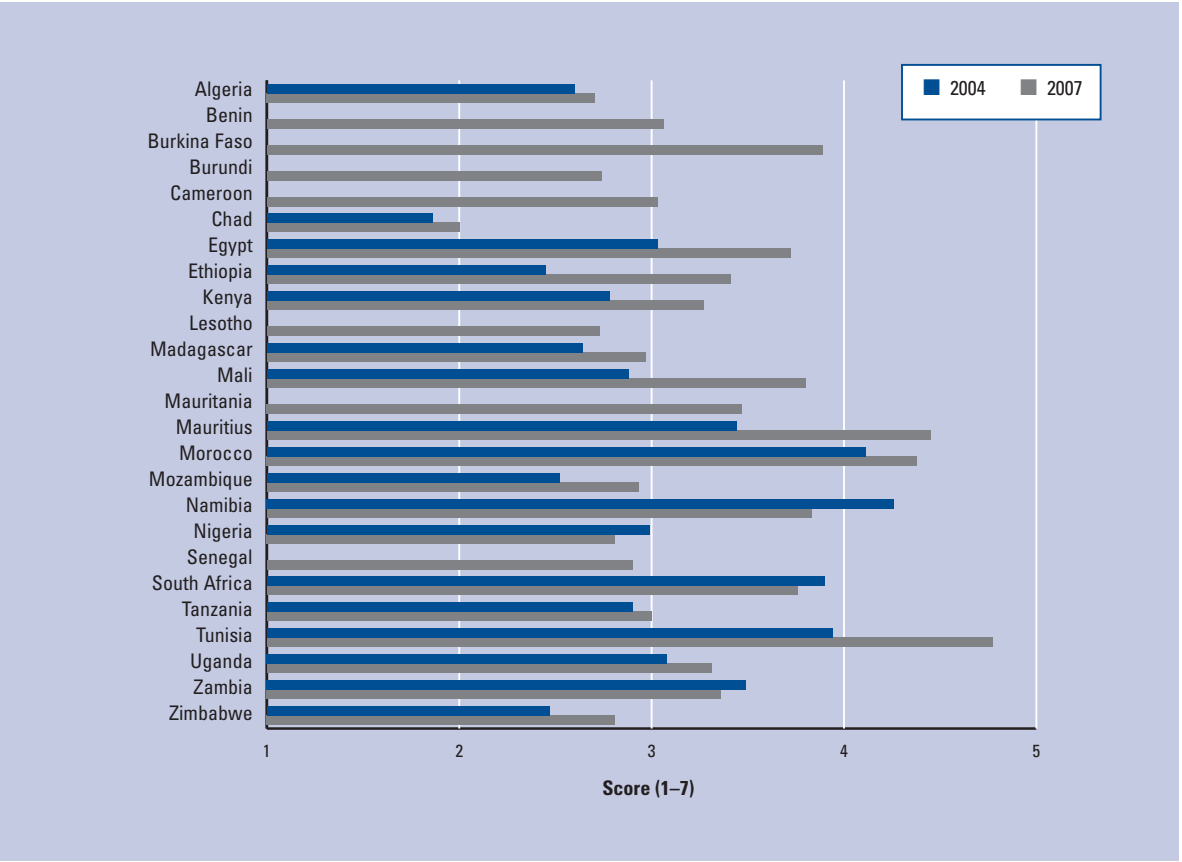
Source: World Economic Forum; World Bank; GEA; and author's calculations. See Appendix B for details.

of efficiency of customs administration, Africa's overall performance is slightly better than Latin America's, although it lags significantly behind the ASEAN countries (see Table 3).

Table 7 shows some of the indicators used to assess the efficiency of customs administration. The burden of customs procedures is a variable from the Executive Opinion Survey, while the Customs Services Index is compiled based on the answers to 17 questions from a survey carried out by the Global Express Association (GEA). The results of this index point to some areas for improvement across the continent. The release of goods is not automated in most countries, although in some countries the introduction of electronic data processing has brought significant benefits—in Tunisia, for example. At the same time, in many countries goods are inspected by only one agency, which contributes to reducing the time and cost associated with clearance. If additional inspections are necessary, these are usually conducted promptly. Yet a few countries could benefit trade by allowing for a separation of physical clearance from fiscal control and could make customs clearance more efficient by introducing a de minimis value for shipments.

Over the past decades, many African countries have reformed their customs administrations; some progress has been achieved. This positive trend is confirmed for

Figure 4: Burden of customs procedures in Africa, 2004–07



most countries in the region by data from the Forum's Survey. Figure 4 shows a comparison of the variable assessing the burden of customs administration between the years 2004 and 2007. Benin, Burkina Faso, Burundi, Cameroon, Mauritania, and Senegal were not included in the Survey until later. Only four countries—Namibia, Nigeria, South Africa, and Zambia—show a negative trend when it comes to the ease of customs clearance. The remaining countries have improved, some of them significantly. Egypt, Mali, Mauritius, and Tunisia show the most pronounced improvements over the past three years.

North Africa

The GETI covers four North African countries: Algeria, Egypt, Morocco, and Tunisia. The countries are mostly spread across the second half of the sample, with best-performer **Tunisia** being the only exception, coming in 49th on the overall ETI and 2nd in Africa, right after Mauritius. The country receives high marks on the business environment and for its fairly efficient border administration. Yet its markets remain sheltered from international competition, with some of the highest tariff barriers in the entire sample. The weighted tariff amounts to 16.8 percent, ranked 114th out of 118 countries. Over the past years, Tunisia has been pursuing bilateral trading agreements with its main trading partners. In this context, Tunisia liberalized trade in industrial goods with the European Union (EU) completely as of January 2008 and is currently negotiating the liberalization of trade in agricultural products and services. Although the proliferation of bilateral agreements has lowered the level of protection in Tunisia since the beginning of the decade, it has also made the tariff schedule more complex and therefore more difficult for businesses to navigate.

Tunisia's border administration is presently considered a major strength of the country's trading environment and is the most efficient among the African countries assessed. It has undergone significant streamlining in recent years; in particular, the introduction of electronic document processing has helped reduce the time and documents necessary to trade across borders.[18] Data from the Survey mirrors these improvements. In 2007, business leaders assessed customs procedures as significantly less burdensome than in 2004 (see Figure 4).

The quality of Tunisia's transport and communications infrastructure is assessed as better than in many other

Table 8: Detailed results of the Customs Services Index

■ No ● Sometimes
■ Yes ● Some

Country	Benin	Burkina Faso	Cameroon	Ethiopia	Kenya	Lesotho	Madagascar	Mali	Mauritania	Mauritius	Namibia	Nigeria	Senegal	Tanzania	Uganda	Zambia	Zimbabwe	Algeria	Egypt	Morocco
Release and/or final clearance of shipments via electronic data interchange for express deliveries																				
Release	■	■	●	■	■	■	■	■	●	■	■	■	●	■	●	■	●	■	■	■
Final clearance	■	■	●	■	■	■	■	■	●	■	■	■	●	■	●	■	●	■	■	■
Full-time (24/7) automated processing	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Release goods at the place of arrival	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Multiple inspections (inspections by agencies other than customs)	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
If multiple inspections are undertaken, are other agency inspections conducted promptly?	■	n/a	■	■	■	n/a	■	n/a	■	■	n/a	■	n/a	n/a	■	n/a	■	n/a	n/a	■
Separation of physical release of goods from the fiscal control	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	●
Exemption from full customs formalities for shipments of minimal value	■	■	■	■	■	■	■	—	■	■	■	■	■	■	■	■	■	■	■	■
Working hours																				
Customs working hours adapted to commercial needs	■	■	■	■	■	■	■	■	●	■	■	●	●	—	■	■	■	■	■	■
Fee for services in normal working hours	■	■	■	■	■	■	■	■	■	■	—	—	■	—	■	■	■	■	■	■
Premium pay for services outside normal working hours	—	■	■	■	■	■	■	—	■	■	—	—	■	—	■	■	■	■	■	■
Receipt and processing of control data in advance of arrival of shipments	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Appeal of customs decisions to a higher level or an independent tribunal	■	—	■	■	■	—	■	■	■	■	—	■	■	—	■	■	■	■	■	■
Pre-entry classification and valuation rulings binding on all ports	■	■	■	■	■	■	No limit	■	■	■	■	■	■	■	■	■	■	■	■	■
Use of reference prices or arbitrary uplifts to invoice values	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Source: GEA.

countries in the region. In fact, only South Africa outperforms the country on the related indicators. Tunisia's strengths relate to the high quality of infrastructure facilities across all transport modes, an efficient postal system, and its businesses' high capacity to absorb new technologies. Yet Tunisia could take on a stronger leadership role in the region with respect to the spread and use of ICTs, and this would further enable the country to take advantage of the benefits of trade. Currently, it ranks 3rd in regional comparison, but occupies a relatively low 60th rank in the overall sample.

On a positive note, Tunisia is characterized by high levels of security, although further opening up to foreign direct investment (FDI) and labor migration would improve the transport sector's regulatory environment and thereby benefit the country's trade performance.

Egypt ranks a low 87th for the ease of getting goods across the border and to destination. The country's relative strengths include a fairly conducive business environment, in particular in the ease of hiring foreign labor, and relatively high levels of security as a result of low cost of crime and violence for business.

Despite efforts to liberalize trade in the country over the past years,[19] trade policy in Egypt remains rather protectionist. Tariffs, which amount to 21.7 percent on average (weighted using the reference group approach), are the highest in Africa and among the highest in the world.[20] Egypt applies very high tariff rates, particularly to agricultural products. The available data on non-tariff

barriers indicate that these constitute an important impediment to enabling trade as it appears that numerous measures are applied to each imported good in Egypt.[21]

Importing goods into Egypt is neither costly nor time consuming, and yet importers raise concerns about the efficiency of customs and, to an even greater extent, of other border agencies. Clearance is assessed as neither particularly effective nor efficient by international standards and customs lack specific services that could further facilitate clearance (see Table 8 for more details).

On a positive note, Egypt boasts fairly well developed transport infrastructure (57th) including the related services (56th). The country is well connected by maritime routes, both in terms of number of transshipments (16th) and in terms of the quality and quantity of liner services (17th). Yet it is somewhat difficult to arrange international shipments in Egypt (95th), shipments do not always reach their destination on time (86th), and the competence of the logistics industry is assessed as below international standards (84th).

In addition to some of the points mentioned above, enabling trade in Egypt will require reforms to the business environment, in particular the rules and regulations relating to FDI and reduction in the cost terrorism is causing for business, where the country currently ranks 95th.

Morocco ranks 74th for the ease of getting goods across the border. As in many countries in North Africa, the high tariffs (ranked 101st) and the fairly prevalent non-tariff barriers (ranked 75th) are the downside of its international trade environment. Although tariffs have been lowered over the past several years, both through unilateral tariff reductions and by pursuing bilateral and regional agreements, they remain high, in particular on agricultural products, where over 62.4 percent of imported goods are subject to tariffs of between 25 and 50 percent.[22]

On the positive side, the country's border administration is assessed as very good—it is 3rd in Africa and 45th out of 118 economies. The fairly efficient customs procedures, numerous customs services available to importers, and low costs to import contribute to this good result. Nevertheless there is room for improvement in the efficiency of import and export procedures, in particular with respect to the number of documents required to import, which is fairly high in international comparison. The 11 documents needed compare unfavorably to the world's best performer, Singapore, at 3 and also to the regional average of 9.1.

Moroccan transport and communications infrastructure is rather well developed by regional standards, ranking 5th in the region, although the absence of competent and reliable logistics services provides a barrier to trading across borders.[23] This could be addressed by further facilitating foreign investment in the transportation sector. Despite the rather low marks for rules governing foreign investment, the business environment is one of Morocco's relative strengths. It is easy to hire foreign labor and the country has very open bilateral Open Skies agreements. In addition, low levels of common crime and violence coupled with high levels of reliability of the police ensure a fairly secure environment.

Algeria ranks 108th in the overall ETI and a low 21st among the 25 African countries covered. The country remains fairly sheltered from international competition, despite its ongoing efforts to join the WTO. Tariff barriers remain high, with the country ranking 115th among 118 countries and applied equally on agricultural and non-agricultural products. Nevertheless, trade is important for the Algerian economy, as export and imports amount to around 70 percent of GDP. While Algeria primarily exports fuels and mining products (98.8 percent in 2006), it predominantly imports manufactures (75.3 percent) and agricultural goods (21 percent). Among the country's relative strengths are quite reliable police services that contribute to a fairly secure environment in terms of crime and violence, although the high costs of terrorism for business offset this advantage somewhat.

As Algeria advances toward WTO membership, tariff barriers are likely to be lowered significantly. To date, Algeria is successfully pursuing economic partnerships with its major markets, in particular the European Union. In addition to the tariff and non-tariff barriers, importers and exporters in Algeria are burdened by a fairly inefficient and opaque border administration. The clearance process is cumbersome, time consuming, and costly. It takes 23 days to import goods into the country and costs US$1,378 per container of standardized goods. Businesses also rated the efficiency of the clearance process as 107th among 118 countries. Therefore, as Algeria moves toward diversifying exports and improving its trade performance context, continued focus on efficiency improvements in border administration will be essential.

Sub-Saharan Africa

At 40th position, **Mauritius** is the highest-ranked country in the sub-Saharan African region, ahead of some EU countries as well as all the BRICs. On many of the categories assessed, Mauritius emerges as the best performer in the region. As one might expect of a small open economy, Mauritius ensures a high level of market access (11th overall and 1st in the region), with low tariffs and low non-tariff barriers, and it allows a large share of imports into the country duty-free.

The country also has a well-rated border administration, with relatively little time and cost and hassle related to getting goods over the border. Mauritius is by far the best performer in the region on the related indicators. The high level of transparency and good governance prevalent in the country is helpful in this respect, but the government also recognizes the importance of customs reforms and pursues international cooperation.

The country's customs administration provides more services to users than in many other countries in the region (40th)—in particular, physical release and the fiscal clearance are separated, multiple inspections are carried out promptly, and shipments of low value are exempted from customs formalities.

While transportation and communications infrastructure in Mauritius compares well with other countries in the region, it remains the main area for improvement, particularly with regard to upgrading transportation services, where the country currently ranks a low 96th. Tracking and tracing services are barely available, the logistics industry is assessed as lacking competence, and shipments are difficult to arrange and rarely reach their destination on time. At the same time, the quality of transport infrastructure is assessed as high across all the modes of transport available. Mauritius operates the second largest container port in sub-Saharan Africa. The country is also the regional leader with respect to the use and penetration of ICTs, ensuring fairly high levels of connectivity through fixed and mobile telecommunications as well as broadband.

In addition, the country has made great efforts to improve its business environment over the past two years, since the Business Facilitation Act passed in 2006 made the establishment of businesses—by foreigners as well as citizens—easier.[24] In addition, a number of measures to facilitate the granting of work permits to foreigners were announced in 2007. As a consequence of its openness to foreign ownership, Mauritius has been benefiting from significant inflows of FDI over the past years. Last but not least, levels of security in the country are good, particularly by regional standards.

South Africa is ranked 2nd in the subregion at 59th, the only other sub-Saharan country in the top half of the overall ETI rankings. Contrary to Mauritius, South Africa's main strength as measured by the Index is its transport and communications infrastructure (45th), particularly attributable to the quality of air transport and roads, as well as the comparatively high quality of transport services in the country (34th). At the same time, telecommunications systems, although relatively well developed by regional standards, lag behind in international comparison.

The country's border administration is seen as somewhat inefficient (57th). Although it is characterized by relative transparency (36th), it is time consuming and costly to import goods into South Africa, even by regional standards. In contrast to Mauritius, import procedures cost twice as much and take more than double the time.

South Africa has pursued a trade liberalization program since 1994, which contributed significantly to opening the economy. Yet market access still proves difficult (67th), with relatively high tariff and non-tariff barriers. The average weighted tariff rate remains high, but more than half of the country's imports enter duty-free. At the same time, the tariff structure remains very complex with a large number of tariff lines qualified as peaks.[25] A review of the tariff structure to reduce complexity and lower tariffs for strategically important upstream sectors is under way. With respect to non-tariff barriers, although relatively few measures are in place, they affect more than 90 percent of the country's imports.

Yet the main areas of concern in South Africa relate to the regulatory environment, which is not entirely conducive to cross-border trade (86th), as well as serious concerns about safety levels in the country (100th), attributable to the high cost of crime and violence for businesses.

Namibia ranks 77th in the ETI. A member of SACU, Namibia's overall trade environment is fairly free, although by international comparison the country does impose fairly high tariff barriers, where it ranks 80th out of 118 countries. Yet these apply to less than half of goods imported. This relatively high share of duty-free imports is a result of regional liberalization under the Southern African Development Community (SADC), of which Namibia is also a member. As a member of SACU, Namibia abolished tariff barriers for SADC member countries in 2000, which affects a significant share of Namibian trade, as it maintains close trade links with South Africa.[26] Since January 2008, SADC has officially launched a free trade area, which will further facilitate trade by harmonizing customs procedures, classifications, and documents; establishing one-stop shops at borders; and facilitating transshipment through member countries. Namibia has also been pursuing Economic Partnership Agreements (EPAs) with the European Union to ensure that Namibian goods obtain preferential treatment in EU markets.

In terms of its border administration, Namibia is assessed as 79th out of 118 countries, much in line with the overall ranking. Businesses find customs procedures relatively burdensome, placing the country at 59th in international comparison. This perception is also reflected in the availability of customs services as measured by GEA's Customs Services Index. Here, Namibia ranks 94th in the overall sample. The absence of a minimal value requirement and the failure to separate the physical release of goods from fiscal control contribute significantly to the burden of customs procedures, as do the business-unfriendly opening hours of the relevant institutions. This is also reflected in the assessment of the import and export procedures as a whole, including border agencies. On the overall effectiveness and efficiency of clearance of customs and border agencies, Namibia ranks 93rd, and the time, cost, and number of documents to import fall into the third quartile of the sample. Bringing these procedures more in line with international standards would reduce the cost of imports and contribute to further strengthening Namibia's international competitiveness, particularly given that Namibia has the advantage of a fairly transparent environment compared with other countries in the region.[27]

The quality of transport infrastructure in Namibia is second to none in Africa and constitutes another strength of the Namibian trade environment. Yet efforts will need to be made to upgrade the quality of the related services, where Namibia is 22nd among the 25 African countries. The development of better services must go hand in hand with a more conducive regulatory environment for transport services. Relaxing restrictions on the movement of labor and on FDI could contribute to improving the quality and lowering the price of transport services.

Uganda, ranked 4th in the region at 79th, follows closely behind Namibia, but with quite a different profile. Uganda's main comparative strength is in its regulatory environment (33rd), with rules encouraging FDI and the ease of hiring foreign labor. Uganda is also characterized by higher levels of market access (58th). Data on non-tariff measures point to a fairly low level of these measures, although Uganda uses high tariffs—in particular on agricultural products—to protect the local producers. However, in contrast to many other countries in the region, Uganda allows over half of its imports to enter duty-free (58th). This is, to a certain extent, a result of the regional trading agreements concluded with neighboring countries under the East African Community (EAC). The EAC has also signed economic partnership agreements with the EU, which will further liberalize trade with this important trading partner.

The country's customs administration is somewhat efficient by regional standards (62nd) and compares relatively well with other countries in the region (6th). This is the result of a series of reforms conducted in the country. Nevertheless, the cost for importing goods remains very high at US$2,900 per container, and some concerns about the burden of customs procedures remain among the business community (85th), although many services have been put in place in the customs administration (50th; see also Table 8 for details).

Unlike Namibia, Uganda's transportation and communications infrastructure is comparatively underdeveloped (93rd). The quality of infrastructure facilities across practically all modes of transport is poor, with only the access to ports assessed slightly better, at 58th. However, the availability and usage of ICTs such as fixed and mobile telephones, broadband, and Internet is very limited compared with the already low regional standards, ranking 21st in the region. And as for most other countries in the region, security concerns remain an obstacle, although the business environment has some advantages as it is open to FDI (21st) and has rules that are conducive to employing foreign labor (16th).

Zambia ranks 85th in the ETI, a fairly good showing for a landlocked country. Zambia's trade policy is characterized by preferential agreements with neighboring countries and other important markets such as the European Union. The country imposes a fairly high average tariff of 11.6 percent on all goods, with a slightly higher tariff for agricultural products. As a member of SADC and the Common Market for Eastern and Southern Africa (COMESA), Zambia has duty-free agreements with its main African trading partners. Overall, the tariffs are imposed on 43 percent of products entering the country, with major imports such as machinery, chemicals, and some agricultural products entering duty-free to a large extent.[28] As a result, the country ranks 55th on the tariff and non-tariff barriers pillar.

One of the major impediments to bringing goods across borders in Zambia is the weak border administration. Zambia ranks 103rd on the related subindex of the ETI. Although different types of customs services are available, as reflected in the 33rd position on the relevant variable, the overall efficiency of procedures and clearance is in need of improvement. Businesses assess the burden of customs procedures at 78th position worldwide and the effectiveness and efficiency of clearance at 100th. Heightened efficiency would also lead to lowering the cost and time of importing goods, currently some of the highest in the world. It takes 64 days and costs US$2,840 to import a standard container into Zambia, as opposed to three days and US$367 in Singapore, the world's best performer in both categories. The inefficiencies in border procedures give rise to a significant lack of transparency related to the clearance of goods and the granting of import and export licenses. Zambia occupies one of the last positions in the entire sample in terms of the transparency of border administration (112th out of 118 countries).

The transport and communications infrastructure in Zambia is another area where improvements will be necessary if the country wants to further enable trade. In this context, it is important to note that the access to ports is rated as fairly satisfactory in the overall picture (the country ranks 63rd, with a score of 3.7 on a scale of 1 to 7) by the Zambian business community. The airport density also stands out as satisfactory (ranking 49th) with a somewhat lower assessment of the quality of air transport infrastructure (74th). Both modes of transport are potentially important for Zambian exporters, as the country is landlocked. At the same time, the quality of Zambian roads and railroads lags behind, assessed at 99th and 83rd position, respectively. Equally important, better ICT infrastructure—which currently ranks 99th globally—would bring many advantages. An improvement in this area would contribute to facilitating communication with clients and the search for information, and enable the customs administration to automate parts of the clearance process, thereby streamlining it and reducing opportunities for corruption

The overall business environment for transport services is rated positively and is the most pronounced strength of the Zambian trading environment. Zambia ranks 30th worldwide and 1st in Africa for the regulatory environment for transport service providers. The country is fairly open to foreign labor and FDI, and foreign

ownership is quite prevalent. The absence of terrorism contributes to the country's physical security, although crime and violence impose a high cost on business.

Kenya is ranked 86th overall. Similar to other East African Community (EAC) members, such as Uganda, Kenya demonstrates fairly open access to its markets by regional standards (55th). The level of tariffs is below the regional average,[29] and a high share of imports enters the country duty-free (43rd). In addition, the country displays relative openness to multilateral trade rules (56th).

Potential positive effects of the country's openness to trade are constrained by the limited efficiency and transparency of the border administration. Customs procedures are considered burdensome by the business sector, and customs services could be further developed in order to facilitate clearance (77th).

The country's transport and communications infrastructure is relatively underdeveloped (90th), with all types of transport infrastructure bar airports in need of upgrading. The rather limited access to telecommunications infrastructure further holds back trade as it hinders efficient communication and the full use of electronic channels for processing customs clearance documentation.

Yet the greatest concerns in the country are related to the security situation, where Kenya ranks 108th overall. Concerns about terrorism and crime and violence all increase the cost and difficulty of getting goods to destinations, particularly because the police services cannot be fully relied upon to provide protection.

Two places below Kenya we find **Madagascar**, at 88th position. Madagascar's strength is its relatively open market, which ensures low prices for imported goods. The country ranks a high 26th in the entire sample and 3rd in the region, after Mauritius and Lesotho, with respect to tariff and non-tariff barriers. Madagascar recently became a member of SADC and COMESA; this has led to a further lowering of tariffs. Presently, the level of tariff duties is below the regional average at 8.4 percent, affecting 47 percent of all imports. Non-tariff barriers are virtually nonexistent, as only 4 percent of trade is affected by very few measures.

Yet, although the country has a fairly open trade policy, inefficiencies in the functioning of the border administration raise the cost of imports and lower the amount of customs duties collected. The business sector considers that customs clearance is burdensome, and customs provides few services to trading companies. For example, fully automated clearance is not available and shipments of minor value are not exempted from customs procedures. As a result, although clearance is less costly than in most countries in the region, it is nevertheless more time consuming. However, reforms of customs are to be continued and electronic data interchange systems to be introduced.[30]

Madagascar's transport infrastructure is, on average, in better shape than in many other countries in the region, mainly because of the importance of tourism for the country's economy. In particular, airport density stands out positively at 20th rank, with 1.7 airports per million population, on a par with the much more advanced economies of Denmark and Croatia. The quality of transport infrastructure is assessed somewhat less favorably, yet still above the regional average. However, increasing tourism and raising exports of natural resources will require additional investment in the road network and the capacity and quality of port infrastructure, currently assessed at a low 108th rank. Equally, telecommunications infrastructure—in particular fixed and mobile telephony networks (110th and 112th in terms of penetration, respectively)—is in need of development. Last but not least, the country's business environment, ranked 89th overall, would benefit from more FDI-friendly rules (92nd) and from measures to reduce crime and violence (100th).

Mali ranks 90th in the ETI, with notable strengths in regional comparison being its fairly open trade regime, ranked 6th among the countries assessed. Mali's tariff barriers are in line with the regional average, but, according to the data, only very few non-tariff measures are in place.

The weakest area among the four subindexes is Mali's inefficient border administration. The country ranks 111th on this indicator; among the African countries, only Zimbabwe and Chad achieve poorer results. Although businesses assess customs procedures as less burdensome than in other countries in the region, customs services should be enhanced to further facilitate trade. Mali ranks 101st in the related index in particular because of the absence of automated systems for customs procedures and the lack of separation of physical clearance of goods from fiscal control. It is therefore not surprising that it is time-consuming and costly to import goods into Mali. The country ranks 107th on the time and 104th on the cost of importing goods.

Another area of weakness is the country's transport and communications infrastructure, as reflected in the 22nd rank among the countries in the region. In particular, the availability and quality of airports and roads is assessed as below the region's average. At the same time, however, access to ports, which is very important for a landlocked, resource-exporting country, is rated more positively (62nd overall).

Mali's business environment is among the country's most important strengths. The government has made significant strides toward improving overall governance and the operating environment for companies, and this is reflected in the results of the ETI. In regional comparison, Mali occupies a good 6th rank. It is easy to hire foreign labor and foreign ownership is welcome and prevalent. At the same time, the country is relatively unaffected by crime or violence and terrorism, and police services are fairly reliable.

Two ranks below Mali we find **Cameroon**, at 92nd position in the ETI. Cameroon's performance does not

show significant differences across the 10 pillars of the Index. The country ranks 87th in terms of access to markets, as it imposes fairly high tariff barriers (14.1 percent weighted by imports). However, only very few non-tariff barriers have been observed. Only 8.8 percent of Cameroon's imports are affected by non-tariff measures,[31] putting the country at 8th place in the entire sample, but only 5th among the African countries assessed.[32] What is worrying, however, is that Cameroon applies tariffs to almost all the imports entering the country (94 percent), which significantly reduces the competitiveness of its domestic exporters by making inputs more expensive and indicates little government commitment to trade liberalization.

In comparison with other countries in the region, border administration does not appear to be among the most pressing priorities to be addressed. Cameroon ranks 7th out of African countries covered in this study on the related pillar. However, the Index highlights transparency related to imports and exports as a particular problem. Overall, the business environment in Cameroon lacks transparency, as reflected in the low rank in the Corruption Perceptions Index, and irregular payments related to import and export permits are common.[33] Notwithstanding the lack of transparency, customs and border administration appear to be working fairly efficiently: in the region, only Tunisia obtains higher marks for the effectiveness and efficiency of clearance, and the cost and time to import are below the regional average.

The weakest area in Cameroon's performance in the ETI is the state of the country's transport and telecommunications infrastructure. Ranked 21st in Africa and 112th worldwide, this constitutes an important impediment to trading across borders. Cameroon performs weakly across all the infrastructure-related pillars taken into account by the ETI. In particular, the quality of infrastructure is among the weakest in Africa across all modes of transport.

Lesotho ranks 95th and displays particular strengths in the market access subindex, where the country is ranked 2nd among the African countries covered. Both low tariff and non-tariff barriers contribute to this excellent result, not surprising given that Lesotho has intense trade linkages with South Africa because of its geographical location and size. In regional comparison, only Mauritius has lower tariffs on imports than the 4.2 percent imposed by Lesotho.[34] At the same time, as for many least-developed countries, Lesotho has very low non-tariff barriers where it ranks 4th out of 118 economies. The good result on the two indicators is somewhat offset by the fact that tariffs are imposed on a large majority of goods entering the country (79 percent).[35]

Although Lesotho is a fairly open country, a number of improvements to its trade environment could further benefit the economy. Raising the efficiency of customs administration would lower the price of imported goods on which the country strongly relies because of its small size. The efficiency of customs administration is second lowest among the countries in the region assessed by this study, with only Chad displaying lower marks. The business community finds that customs procedures are among the most burdensome in the world, ranked at 106th. One of the reasons for this poor assessment may be that only few customs services are available (99th rank; see Table 8 for details). Although the country is in the middle range when it comes to overall corruption, ranked 65th, irregular payments related to import and export licenses are quite pervasive (105th rank).

In terms of transport and communications infrastructure, Lesotho is one of the weakest performers among the African countries covered, ranking 115th worldwide.[36] Infrastructure for all modes of transport—air, railroads, roads, and access to ports—is weakly developed. In addition, many of the services necessary for the transport sector to function efficiently are not available or of poor quality in Lesotho. For example, it is difficult to track and trace international shipments, which often do not arrive on time. These difficulties are also related to the low penetration and limited use of ICTs. Here, Lesotho is also among the weakest performers in the region, ranking 110th worldwide.

Although the country's business environment is fairly open to foreign ownership, labor mobility is restricted, which impacts negatively on the business environment for transportation services. In addition, the threats of violence and crime impose additional cost on transportation companies.

Ranking 97th, **Mauritania** comes in 14th out of 25 African countries assessed. The country's performance is pretty even across all the subindexes of the ETI, with the exception of the business environment, where it performs relatively better, achieving the 66th position.

Mauritania's trade intensified over the past few years following the discovery of oil reserves, which also led to a surge in imports in machinery and consumer goods. Market access in the country is characterized by rather high tariff barriers that are imposed on almost all goods entering the country.[37] In addition, Mauritania has not signed a large number of the international treaties related to trade and therefore ranks 95th on the index of openness to multilateral trade rules.[38]

According to the ETI results, measures aimed at increasing the overall efficiency at the border would alleviate an important obstacle to trade in Mauritania. The country ranks a low 111th on the pillar measuring the efficiency of customs administration, with only three other African countries coming in lower.[39] Customs does not provide a sufficient array of services to exporters and importers (106th), although the business sector assesses customs procedures as less burdensome than in most other countries in the region. Nevertheless, it takes 42 days and 11 documents to clear goods, more than in many other countries in the region (see Table 7).[40]

Transport infrastructure is equally in need of improvement in Mauritania, as reflected in the low 110th rank for the quality and availability of facilities. Although railroads are relatively better developed than in many countries in the region (78th) and airport density is higher (62nd), the quality of roads and port infrastructure is among the weakest in the world (106th and 103rd, respectively). Investment in this area, as well as in increasing the use and availability of ICTs, would further facilitate trading across borders.

One of Mauritania's advantages is its rather open regulatory environment, in particular when it comes to hiring foreign labor, but also to encouraging the inflow of FDI. At the same time, the country's businesses suffer relatively little from costs imposed by crime and violence.

Benin ranks 98th in the ETI and performs relatively evenly across the 10 pillars composing the Index. Over the past decade, Benin's economy became less and less integrated with the global economy, as reflected in the falling share of trade in its GDP. In 2005, the country's trade-to-GDP ratio amounted to just above 40 percent, a very low value for a small country. Improving market access, border administration, and transport infrastructure would contribute to better integrating Benin into global trade flows, improve the competitiveness of its export products, and lower the cost of imports. Although the country's tariff barriers are moderate in regional comparison (74th), they are imposed on the large majority of products (87 percent, 104th rank).

The efficiency of customs procedures is approximately in line with the regional average, ranked 87th for burden of customs procedures and 80th on the index of customs services. Benin is one of the regional best performers in terms of number of documents necessary for importing, but it remains time consuming and costly to import goods into the country. This could be due to the generally low level of transparency in international comparison.

Among the four subindexes assessed, transport and communications infrastructure shows the weakest performance, at 109th rank. Although Benin is well connected to international sea routes (54th rank in the transshipment connectivity index), transport infrastructure is not widely available and of poor quality: airport density is low, and air transport and port infrastructure as well as roads are underdeveloped. Yet the quality and availability of transport services are higher than the regional average and Benin ranks 5th in the region in the related pillar. Enhancing the use and availability of ICTs would further contribute to facilitating trade across borders.

On a cautiously positive note, Benin is a fairly safe country with little cost imposed on business by terrorism and relatively reliable police services. Moreover, the business environment is open to hiring foreign labor, although mostly restrictive to FDI.

Burkina Faso comes in 99th in the ETI, showing mixed performance across the four subindexes. Although the country performs relatively well in regional comparison with respect to market access and the business environment, improvements will be necessary of its border administration and infrastructure for transport and communications.

The country's trade barriers are among the lowest in the region, ranking 5th among the African countries and 32nd overall. This result mirrors the low non-tariff barriers imposed in the country, while tariffs are slightly below the regional average (see Table 6). However, tariffs are imposed on a large majority—78 percent—of imports, although this is just under the regional average.

Improving trade performance will require increasing the efficiency of the border administration, including customs and related agencies. Although business leaders do not view customs procedures as overly burdensome, related data nevertheless indicate that the overall process of clearing imported goods is time-consuming and extremely expensive. It takes 54 days to clear a container in Burkina Faso, and it costs US$3,522, one of the highest costs in the entire sample (111th rank). In addition, customs services are scarce, as reflected in the low position of the country in the GEA's Customs Services Index. Procedures are not automated and many services that could facilitate clearance, such as electronic platforms, are not in place. On a positive front, Burkina Faso is less affected by lack of transparency than many of its neighbors (79th rank on the transparency of border administration pillar).

The quality of its transport infrastructure emerges from the analysis of the ETI as one of the country's major weaknesses. In particular, air transport infrastructure is assessed as weak, both in terms of airport density and also in terms of the quality of the available infrastructure. Yet, given that the country is landlocked, it is worth mentioning that access to ports in neighboring countries is considered fairly good (60th position overall).

The country's fairly trade-enhancing business environment (74th) is characterized by openness to FDI and to foreign labor, and also by fairly reliable police services (49th) and, in regional comparison, reasonably low levels of crime and violence (83rd overall).

Senegal ranks 100th in the ETI, right ahead of Mozambique and Tanzania. This fairly low rank clouds some positive aspects of the country's trade environment. In particular, its highly restrictive trade policy impacts the overall performance on the ETI negatively. Senegal ranks 109th in terms of market access out of all countries and 20th in regional comparison. All imported goods are subject to non-tariff measures and the number of measures for each of the types of goods is also very high. At the same time, the country imposes tariff barriers that are fairly high by international standards, although below the regional average. In addition, tariff barriers are

imposed on almost all imported goods, and only 9 percent of imports enter the country duty-free.

The country's border administration would benefit from enhanced efficiency. In particular, customs procedures are considered quite burdensome by the business community (98th rank), although the overall effectiveness and efficiency of clearance of all the border agencies is assessed somewhat better, at 68th overall. The time necessary to import goods is significantly lower than the regional average, and although more documents are required, the cost is below the average for the countries under review (see Table 7). However, Survey data for Senegal points to high irregular payments for imports and exports, where Senegal ranks 107th in international comparison. This is somewhat surprising, given Senegal's relatively good standing at 57th position in the Corruption Perception Index,[41] which measures the overall level of transparency in the country.

The Senegalese transport and telecommunications infrastructure is better than the regional average. Among the 25 countries discussed in this study, Senegal occupies the 7th rank in the relevant subindex. In particular the quality of air transport infrastructure is above the regional average, ranked at 52nd overall. Airports are also fairly easily reachable, as reflected in the 79th rank for airport density. Although the quality of the railroad infrastructure is in need of improvement (96th), the country boasts a relatively well developed port infrastructure (68th). The fairly good results in terms of transport infrastructure are not matched by the quality and availability of the related services. It is fairly difficult to arrange international shipments, tracking and tracing is not always available, and it is difficult to predict the time for shipments to arrive.

Senegal's strength lies in its fairly secure and open business environment that provides a good base for logistics and transportation services to develop further. It is not particularly difficult to hire foreign labor (37th), foreign ownership is frequent (41st), and rules related to FDI do not have a significantly deterring effect on investment (66th). Police services are to a large extent reliable (43rd), and the threat of terrorism does not impose significant costs on business (40th).

Mozambique ranks right behind Senegal at 101st place. The country has reasonably low trade barriers, in particular when compared with other countries from the region. Mozambique ranks 4th in Africa on the tariff and non-tariff barriers pillar. At the same time, however, the overall cultural and political situation in the country does not appear to favor international trade. Only a small share of goods (18 percent) enter the country duty-free, despite the free trade area within SADC, and only very few multilateral agreements have been signed by the country, as indicated by the low 111th rank on the related indicator.

The customs administration in Mozambique has undergone significant reforms since the end of the civil war in 1994.[42] Important components of these reforms were related to introducing systems and procedures to deter corruption and also included the computerization of the major customs locations. Overall, the government recouped the investments made in the early stages of the reform program after 14 months from additional revenues, as the reforms led to increased efficiency in the collection of customs duties. Consequently, it is significantly less time-consuming and costly to import goods in Mozambique than the regional average. As can be seen from Table 7, it takes 38 days to import standardized goods against an average of 42.0 and it costs US$1,185, almost 40 percent less than the regional average of US$1,902.5.

The downside in Mozambique's trade environment is the country's weakly developed transport and communications infrastructure. Although the airport density is quite high, the quality of roads, ports, and airports is insufficient. Only 18.7 percent of roads are paved (92nd rank), and the business sector assesses the quality of roads at the level of 2.0 on a scale of 1 to 7 (112th rank). Also, the quality of port infrastructure is rated at 2.7 on a scale of 1 to 7, which corresponds to the 99th rank.

Mozambique scores particularly weakly on all indicators related to the use and the availability of ICTs. These technologies often facilitate trading across borders as they allow for easy access to information and easy contact with clients and are also key for the automation of clearance procedures, tracking and tracing, and so on. The country lags behind its peers on all related indicators, such as telephone lines (116th), mobile telephone penetration (104th), access to broadband (110th), and use of the Internet (109th).

Unlike other countries in the region, the business environment is closed to foreign investment and labor and also is not perceived as secure. In particular, police services are considered to be less reliable than in many other countries in the region (100th), and crime and violence impose higher costs on business than in the region on average (104th).

Tanzania ranks 102nd in the ETI, with a fairly even performance across the 10 pillars composing the Index. Market access is fairly restricted, primarily by non-tariff barriers. All trade is subject to non-tariff measures and, by international comparison, many measures are applied at each tariff line. However, on the positive side, tariffs, which mainly concern agricultural products, are lower than the regional average (7.7 percent ad valorem compared with 10.5 percent on average) and 52 percent of goods enter the country duty-free, a fairly high value compared with other countries in the region.

Tanzania's border administration is ranked 10th out of the 25 countries assessed. Although importing goods is significantly less time consuming and less costly in Tanzania than in Africa on average, and fewer documents are necessary (see Table 7), customs procedures as well as the overall clearance process are considered very

burdensome, ranking 93rd and 102nd, respectively. Customs does not offer the full range of services necessary to facilitate trade across borders; for example, the physical release of goods is not separated from their fiscal release and shipments with a very small value are exempted from customs formalities.

As in many other countries in the region, insufficient transport and communications infrastructure is the most serious obstacle to trading across borders. On the overall subindex, Tanzania ranks 111th overall and a low 20th out of the 25 countries assessed. Across all modes of transport, the quality of infrastructure is poor and local transport services have only insufficiently developed their offerings. For example, tracking and tracing is barely available (104th), it is difficult to plan the time of shipments (113th), and it is complex to arrange international shipments (111th). All these factors affect the country's trade performance. In this context, addressing the low ICT penetration,[43] along with Internet literacy (107th) and the low ability of firms to absorb new technologies (82nd), would contribute to enhancing the quality of transport services provided.

Tanzania's business environment is the country's main forte, the result of recent efforts to improve the situation.[44] The country is fairly open to foreign labor (73rd) and rules and regulations are conducive to foreign business ownership (44th); Tanzania therefore attains a solid 66th rank on the overall regulatory environment for exporters and importers.

Ethiopia, the second-most populous country in Africa, comes in at 106th in the ETI, right ahead of Syria (107th) and Algeria (108th). The country's restrictive trade policy is reflected in tariff rates that are above the regional average, amounting to 12.4 percent ad valorem, and in the small share of products imported duty-free (20 percent, corresponding to a 94th rank).[45] Indeed, within Africa the country ranks last but one on the market access subindex, with only Algeria characterized by an even more restrictive trade policy.

In addition to tariffs, inefficiencies in the country's border administration further contribute to increasing the price of imported goods (96th on the subindex). Although the customs administration appears to be working somewhat satisfactorily, similar to the average performance of the 25 countries assessed (see Table 7), it is time consuming and excessively costly to import goods in Ethiopia. The cost of clearance of a container is 44 percent higher than the African average and among the highest in the entire ETI sample (106th). The cost of US$2,793 per container is all the more striking when put in relation to the country's income level—this amounts to more than 13 times Ethiopia's GDP per capita.

Overall transport and communications infrastructure is in line with the low regional average. However, the quality of infrastructure is assessed differently depending on the modes of transport. The port and airport infrastructure is considered to be fairly good (51st and 53rd, respectively), on a par with more developed countries such as Kuwait and Egypt. However, roads and railroads are poorly developed, ranking 92nd and 102nd, respectively. Most of all, Ethiopia lags behind when it comes to the prevalence and use of ICTs. It is the weakest performer among the 25 countries on the related pillar, with the lowest Internet use and mobile penetration in the entire sample as well as very low fixed penetration rates (104th).

The country's business environment is among Ethiopia's relative strengths, mainly because of the perceived low cost of crime and violence and the fairly reliable police services. More openness to foreign labor and ownership would further facilitate doing business for companies involved in international trade as well as transport service providers.

A few places lower, **Nigeria**, the largest African country by population, ranks 111th overall and displays a consistent performance across most of the pillars, with the exception of the regulatory environment. Market access is among the most restricted among the 25 countries, with Nigeria occupying the 19th rank regionally. This result reflects the country's relatively high tariff barriers, which amount to 13 percent ad valorem that are applied to a large majority of products, in particular to agricultural imports.[46] On a positive note, however, Nigeria has signed a significant number of multilateral agreements, is engaged in a number of regional trade initiatives, and has fairly intense trade linkages with its neighbors.

The country could benefit from a substantial overhaul of its border administration, currently ranked at 18th position among the 25 countries in the region. Customs procedures are judged excessively burdensome by the business community, ranked 103rd, and only few customs services are available (94th). However, although time consuming, it is not particularly costly to import goods into Nigeria. Officially it takes about 46 days to import goods and the cost of the entire procedure is significantly below the African average (US$1,047 for Nigeria vs. US$1,902.5 for the region; see Table 7), but operations in the country are affected by the perceived lack of transparency related to foreign trade, and in general.

The quality and availability of Nigeria's transport infrastructure lags behind many of its regional peers. This is unfortunate given the country's natural resource wealth, which could be invested in infrastructure. Although Nigeria is very well connected to international maritime routes (30th), the quality of roads, railroads, and airports is suboptimal, as reflected in the low position the country occupies on the pillar that assesses the availability and quality of infrastructure (105th overall and 15th in the region). Transport services are equally underdeveloped, although the overall regulatory environment is fairly open to investment and to hiring foreign labor. At the same time, insufficient security imposes relatively high

costs on business. Nigeria ranks 24th out of 25 African countries for its physical security because of its unreliable police services and the high cost that crime, violence, and terrorism impose on business.

In light of the recent economic meltdown, **Zimbabwe**'s ranking of 112th out of 118 countries appears almost encouraging. The country's trade policy is characterized by fairly high tariff barriers that are restrictively applied on almost all countries. At the same time, data indicate that only a small share of trade is affected by non-tariff measures.

The country's border administration is largely inefficient by regional comparison. Among the countries included in the study, only Chad has a weaker showing than Zimbabwe on the border administration subindex. Clearance by customs and other border agencies is excessively burdensome, costly, and time consuming. It takes 67 days and costs US$2,420 to import goods into Zimbabwe; irregular payments are the norm rather than the exception, as reflected in the low 107th rank on the Corruption Perceptions Index.

The quality of transport infrastructure in Zimbabwe is approximately in line with the regional average. Although airport density is low and the related infrastructure dilapidated, railroads, roads, and access to ports are assessed somewhat better at 56th, 64th, and 53rd rank, respectively. As for communications infrastructure, it is significantly more underdeveloped. In particular, mobile telephony, which in many countries provide a substitute for the fixed telephone lines, is underdeveloped.

The regulatory environment in Zimbabwe is considered to be the poorest within the entire ETI sample of countries, not surprising given the country's current economic and political situation. FDI is virtually nonexistent and inhibited through rules. Also physical security is very low with crime and violence widespread, and police services cannot be relied upon to ensure law and order.

Burundi, the poorest country in the entire sample according to GDP per capita, ranks an extremely low 117th in the ETI. The country's performance is consistently weak across all the pillars of the Index, although there are somewhat better results on transparency and physical security.

Burundi's market is one of the most protected in the entire sample, ranking 115th out of 118 countries for market access. Although tariff duties are only slightly above the African average (11.6 percent), they are applied on almost all imports (84 percent). While being a member of the WTO, so far the country has also been reluctant to sign multilateral trade agreements (113th with respect to the openness to multilateral trade rules). And although it appears to display a relatively high level of transparency compared with some other countries from the region (Burundi ranks 8th regionally on the related pillar), border administration lacks efficiency. Customs procedures are burdensome and clearance of goods is very time consuming and extremely costly. Payments associated with clearance of goods amount to almost double the regional average.

Burundi's transport and communications infrastructure is among the least developed in the entire ETI sample and the second weakest among the African countries included. The state of roads and airports is very poor (110th and 112th, respectively), but access to ports is assessed somewhat more positively (88th). The country also does not take advantage of the latest technologies, which could facilitate trade as well as development more generally. It ranks 116th in terms of the availability and use of ICTs.

Chad, ranked at 118th, is the weakest performer in the entire ETI sample. The country performs poorly across virtually all the major categories assessed by the Index, mostly ranking among the bottom of all countries. The country's trade policy is among the most restrictive in the world, ranking 101st with tariff barriers amounting to 14.7 percent—above the African average but still below some of the North African countries. Nevertheless, tariffs are applied to 88 percent of all imports, which corresponds to 106th position.

The efficiency of the Chadian border administration is undermined by arbitrary behavior, fraud, and corruption. Indeed, customs procedures are more burdensome in Chad than in any of the other countries covered (118th): it takes over 100 days and costs more than US$5,520 to clear a container full of goods (see Table 7), and the country ranks last but one in the sample on the Corruption Perceptions Index. Improving governance will be essential to the country's further economic development and poverty reduction, in particular to ensure that the benefits from the recently started oil exploration are distributed fairly and invested to the benefit of the country's population.

The ongoing infrastructure investment program has already significantly contributed to the improvement of the quality of transport infrastructure, especially of roads. Nevertheless, in the ETI roads are still assessed as being of the poorest quality among all the African countries covered. In a landlocked country such as Chad, air transport and access to neighboring-country ports are of critical importance for enabling trade. Both are assessed very poorly, with port access receiving somewhat higher marks (95th) than the quality of air transport infrastructure (114th) or airport density (114th). The infrastructure for communications is equally in a very poor state. The number of fixed telephone lines is the lowest out of all countries assessed and it is not compensated by mobile telephony (113th). As a result, only a minimal share of the population has access to ICTs.

Lack of physical security and a very protected and rigid business environment further contribute to Chad's weak showing in the ETI.

Conclusions

This chapter has analyzed the performance of 25 African countries on the World Economic Forum's Enabling Trade Index (ETI). The ETI, published for the first time in 2008, assesses the factors, policies, and services that facilitate the free flow of goods across borders and to destination. The analysis in this chapter provides insight into the policy priorities for countries that wish to improve their performance with respect to international trade.

Despite numerous initiatives aimed at liberalizing and developing trade in Africa, the continent's share in global trade has fallen in recent decades. One reason lies in the large distance to target markets, which thus increases transport costs. But trade in Africa is also hampered by additional costs that arise through inefficiencies in border administration, underdeveloped transport and telecommunications infrastructure, and ill-adapted business environments. All these factors are captured by the ETI. In comparison with other regions in the world, such as Latin America or Southeast Asia, the 25 African countries on average underperform on the ETI. The best-performing country, Mauritius, comes in 40th, right after Cyprus and ahead of Qatar and Croatia. Yet most of the African countries occupy the lower rankings among the 118 economies assessed.

On average, African countries are comparatively more protectionist than countries in other regions, although significant differences between the individual economies exist—for example, North African countries are more protected than their sub-Saharan neighbors. In the current setting, it is crucial that policymakers keep borders open and continue trade liberalization efforts. The border administration throughout the region is rather inefficient by international standards, and importing procedures are costly in most countries, together these lead to inefficiencies in the collection of fiscal revenues. Trade in Africa would also benefit from more investment in transport and telecommunications infrastructure. At the same time, many African countries boast business environments that, compared with those in other regions, are fairly conducive to trade.

Taking into account the current crisis environment, three major recommendations emerge as the priority for policymakers in African countries.[47]

1. ***Resist the temptation to introduce protectionist barriers.*** Liberalization of trade and markets since the early 1990s was one of the driving forces behind the growth rates achieved in Africa over the past decade; this growth in turn enabled a significant reduction in poverty levels. Introducing protectionist measures to shelter local industries would reduce growth rates and undo the progress achieved over the past years in poverty reduction.
2. ***Continue efforts undertaken in customs reform.*** Over the past years, several African countries have successfully reformed their customs administration (Mozambique, Uganda, and Zambia are just three examples). This has allowed them not only to reduce the administrative burden on exporters and importers, but also enabled them to increase the amount of revenue collected and significantly reduce illicit trade. Additional fiscal revenues could increase the fiscal space of African countries in times when foreign financing sources are scarce.
3. ***Invest in infrastructure.*** Underdeveloped infrastructure remains a significant hindrance to developing trade and the economy in most African countries. Depleted transport infrastructure raises the already high cost of transport even further, especially for landlocked countries, and technological backwardness makes obtaining information and communicating difficult.

Addressing these issues will contribute to improving the trade performance of African countries, which has been identified as a key ingredient to ensuring durable economic growth. By lowering the prices of imported products, these reforms could not only boost internal demand but also increase the export competitiveness of sectors that rely on imported inputs. Improvements to border management and infrastructure would also lower transaction costs of African exports and thereby increase their chances to obtain a larger share of the shrinking global markets. Addressing these issues could thus contribute to alleviating the adverse effects of the global recession on African countries.

Notes

1 Commission on Growth and Development (2008). The other factors are leadership and governance, economic security, fiscal and monetary policy, public investment, health and education, the environment and energy use, global warming, labor markets, and the urban-rural nexus.

2 See Eglin 2008 for an overview of the Doha Round negotiations on trade facilitation.

3 The G20 nations are Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, Korea, Rep., Turkey, the United Kingdom, and the United States, along with the European Union.

4 See Portugal-Peres and Wilson 2008 for a review of the recent literature on trade costs from an African perspective.

5 See Hansen and Annovazzi-Jakab 2008.

6 World Bank, 2007.

7 Dajnkov et al. 2004.

8 For a thorough discussion of measures to be taken at the international level, see Baldwin and Evenett 2009.

9 See, for example, Portugal-Perez and Wilson 2008 and Njinkeu et al. 2008.

10 For data reasons, not all of the countries are covered by the GETR.

11 We have focused on the flow of trade in *goods into* countries in the Index for expository purposes, although we recognize that enabling exports as well as trade in *services* is also important. By circumscribing the issue unambiguously, the ETI provides a useful vehicle for carrying out policy analysis on a clearly defined part of the issue. Trade in goods accounts for upwards of 80 percent of all trade, and is therefore highly relevant. As it is intended for policy analysis, the focus is on imports rather than exports, as this tends to be the area that national governments can most directly influence. It is also important to note that many of the factors and policies included in the model would be equally relevant for an analysis of the factors facilitating the services trade and the enabling of exports.

12 For a full description of the ETI, see Lawrence et al. 2008.

13 See Browne et al. 2008.

14 The lowest quartile covers rank 89 and below (out of 118 countries).

15 Because of the different weights applied to the tariff data, the results for countries in customs unions may differ.

16 Given the difficulties inherent to capturing the level of non-tariff measures and collecting the data, the NTB data provides the best available approximation of the level of non-tariff barriers that affect trade in the countries covered.

17 Inefficient border administration reflects not only customs performance, but also the level and incidence of NTBs as well as the capacity of related agencies to administer them. In many African countries, these agencies are underequipped and do not have the capacity to check the conformity with standards in an efficient manner.

18 See Alavi (2008) for a case study of how Tunisia used ICTs to facilitate trade.

19 Between 2006 and 2007, Egypt cut import tariffs significantly. In addition, Egypt has a number of regional trading areas in place, including the Pan Arab Free Trade Area and the Egypt-EU partnership agreement, as well as bilateral agreements with Turkey and Russia; it also benefits from preferential access to the US market through joint qualified industrial zones with Israel.

20 One reviewer of this chapter raised the issue that the level of tariff barriers for Egypt used in the ETI calculation appears to be higher than in other sources. This difference results from the weighting approach chosen for the tariff data in the ETI. In order to avoid the endogeneity problem associated with using a country's imports as weights, we weight tariffs by the average imports of a group of reference countries and not by the imports of the country itself. In Egypt, agricultural imports are subject to very high tariffs (66.4 percent, simple average, according to WTO 2008). These, in turn, considerably restrict imports of agricultural products. Weighting the tariff with the country's very low imports results in a very low value for the import-weighted tariff. If it is, however, weighted with the average of a group of comparable countries, these imports are taken into account and the value is significantly higher. The applied most-favored-nation (MFN) tariff weighted by the country's imports is estimated at 12.9 percent (9.8 percent when taking into account preferences) by the World Bank (2009), while the value calculated using the reference group approach amounts to 21.8 percent. This difference results from the different weighting methods used to construct the two variables. All countries covered in the ETI are assessed according the same methodology.

21 As pointed out earlier, the level of non-tariff barriers is difficult to capture in particular as countries that are more transparent tend to show higher levels.

22 WTO 2008.

23 For example, tracking and tracing is hardly available and the country ranks 108th on the related indicator.

24 OECD 2008. The full version of the Act can be accessed at http://www.efreeport.com/default.aspx?DLOAD=1.

25 World Bank 2008.

26 In 2006, 82.4 of Namibian imports came from or through South Africa and it was the destination for 24.6 percent of exports; see WTO 2008.

27 Although the high level of transparency applies to a lesser extent to imports and exports—Namibia ranks 74th on irregular payments related to import and export licenses—the result is still encouraging, as reflected in the relatively good 47th rank in the sample on the Corruption Perceptions Index.

28 WTO 2008.

29 Kenya levies relatively higher tariffs on agricultural products than on manufactures. No data are available on NTBs.

30 OECD 2008.

31 The index of non-tariff measures takes into account the share of trade affected by NTMs as well as the average number of notifications per tariff line. Both values are very low for Cameroon.

32 A number of African countries cluster around the top of the ranking of non-tariff barriers.

33 Cameroon ranks 23rd out of 25 countries on this indicator.

34 Compared with South Africa, Botswana, and Namibia—which all have the same tariff schedules because of their membership in SACU—the lower (weighted) tariffs result from the different shares of imports.

35 On the export side, Lesotho benefits from significant preferences in the US market due to the African Growth and Opportunity Act (AGOA) agreement. This has allowed for a significant increase in exports in textiles and apparel from Lesotho to the United States in the last decade.

36 Only Burundi and Chad rank lower in this category.

37 The ad valorem tariff rate amounts to 8 percent (corresponding to 75th rank) and tariffs are imposed on 86 percent of imports, which corresponds to 103rd position. The tariffs on agricultural products are slightly lower than those on non-agricultural goods; see WTO 2008.

38 See Appendix B for the details of this Index.

39 These countries are Chad, Lesotho, and Madagascar.

40 The best-performing country in the region is Mauritius, with 16 days and 6 documents necessary for clearance.

41 Out of 118 countries. The ranking was recalculated to cover only the countries included in the ETI.

42 For a more detailed account, see Moisé 2005.

43 The country ranks 110th for broadband Internet subscribers, 114th for telephone lines, and 98th for mobile telephone penetration.

44 See OECD 2008 for more details.

45 Data on non-tariff barriers for Ethiopia are not available and could therefore not be included in the calculation.

46 Data on non-tariff barriers for Nigeria are not available and could therefore not be included in the calculation.

47 See Kandiero et al. 2009 for a more detailed discussion on the effects of the crisis on trade in Africa.

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Appendix A: Composition of the Enabling Trade Index

This appendix provides details about the construction of the Enabling Trade Index (ETI).

The ETI is composed of four subindexes: the market access subindex; the border administration subindex; the transport and communications infrastructure subindex; and the business environment subindex. These subindexes are, in turn, composed of the 10 pillars of the ETI shown below: namely, tariff and non-tariff barriers, proclivity to trade, efficiency of overall border administration, efficiency of specific import-export procedures, transparency of border administration, availability and quality of transport infrastructure, availability and quality of transport services, availability and use of ICTs, regulatory environment, and physical security. These pillars are calculated on the basis of both hard data and Survey data.

The Survey data are mainly derived from the responses to the World Economic Forum's Executive Opinion Survey and range from 1 to 7; survey data from the World Bank's Logistics Performance Index (LPI) Survey have also been included. The hard data were collected from various sources. All indicators are described in detail in Appendix B to this chapter.

The hard data indicators, as well as the results from the LPI survey, used in the ETI are normalized to a 1-to-7 scale in order to align them with the Executive Opinion Survey's results.[1]

Each of the pillars has been calculated as an unweighted average of the individual component variables. The subindexes are then calculated as unweighted averages of the included pillars. In the case of the availability and quality of transport infrastructure pillar, which is itself composed of two subpillars (availability of transport infrastructure and quality of transport infrastructure), the overall pillar is the unweighted average of the two subpillars. The overall ETI is then the unweighted average of the four subindexes. The variables of each pillar and subpillar are described below. If a variable is one of hard data, this is indicated in parentheses after the description.

Subindex A: Market access

Pillar 1: Tariff and non-tariff barriers
- 1.01 Tariff barriers (hard data)
- 1.02 Non-tariff barriers (hard data)

Pillar 2: Proclivity to trade
- 2.01 Breadth of international markets
- 2.02 Extent of regional sales
- 2.03 Openness to multilateral trade rules (hard data)
- 2.04 Share of duty-free imports (hard data)

Subindex B: Border administration

Pillar 3: Efficiency of customs administration
- 3.01 Burden of customs procedures
- 3.02 Customs services index (hard data)

Pillar 4: Efficiency of import-export procedures
- 4.01 Effectiveness and efficiency of clearance[2]
- 4.02 Time for import (had data)
- 4.03 Documents for import (hard data)
- 4.04 Cost to import (hard data)

Pillar 5: Transparency of border administration
- 5.01 Irregular payments in exports and imports
- 5.02 Corruption Perceptions Index (hard data)

Subindex C: Transport and communications infrastructure

Pillar 6: Availability and quality of transport infrastructure

Availability of transport infrastructure
- 6.01 Airport density (hard data)
- 6.02 Transshipment connectivity index (hard data)
- 6.03 Paved roads (hard data)
- 6.04 Road congestion (hard data)

Quality of transport infrastructure
- 6.05 Quality of air transport infrastructure
- 6.06 Quality of railroad infrastructure
- 6.07 Quality of roads
- 6.08 Quality of port infrastructure

Pillar 7: Availability and quality of transport services
- 7.01 Liner Shipping Connectivity Index (hard data)
- 7.02 Ease and affordability of shipment[2]
- 7.03 Competence of the logistics industry[2]
- 7.04 Ability and ease of tracking[2]
- 7.05 Timeliness of shipments in reaching destination[2]
- 7.06 Postal service efficiency

Pillar 8: Availability and use of ICTs
- 8.01 Firm-level technology absorption
- 8.02 Mobile telephone subscribers (hard data)
- 8.03 Broadband Internet subscribers (hard data)
- 8.04 Internet users (hard data)
- 8.05 Telephone lines (hard data)

Subindex D: Business environment

Pillar 9: Regulatory environment
- 9.01 Ease of hiring foreign labor
- 9.02 Openness of bilateral Air Service Agreements (hard data)
- 9.03 Prevalence of foreign ownership
- 9.04 Business impact of rules on FDI

Pillar 10: Physical security
- 10.01 Reliability of police services
- 10.02 Business costs of crime and violence
- 10.03 Business costs of terrorism

Appendix A: Composition of the Enabling Trade Index *(cont'd.)*

Notes

1 The standard formula for converting each hard data variable to the 1-to-7 scale is

$$6 \times \left(\frac{\text{country score} - \text{sample minimum}}{\text{sample maximum} - \text{sample minimum}} \right) + 1$$

The *sample minimum* and *sample maximum* are the lowest and highest scores of the overall sample, respectively. For those hard data variables for which a higher value indicates a worse outcome (e.g., tariff barriers, road congestion), we rely on a normalization formula that, in addition to converting the series to a 1-to-7 scale, reverses it, so that 1 and 7 still correspond to the worst and best possible outcomes, respectively:

$$-6 \times \left(\frac{\text{country score} - \text{sample minimum}}{\text{sample maximum} - \text{sample minimum}} \right) + 7$$

In some instances, adjustments were made to account for extreme outliers in the data.

2 The LPI data are derived from the World Bank Logistics Perception Index (LPI) Survey, which is based on a 1-to-5 scale. LPI data were normalized to a 1-to-7 scale using the above formula in order to align them with the Executive Opinion Survey results.

Appendix B: The Enabling Trade Index 2008 data

The following section provides detailed information, including computation methods and sources, on all the indicators that enter the Enabling Trade Index (ETI).

For each indicator, the title appears on the first line, preceded by its number to allow for quick reference. The numbering matches the one used in Appendix A. Underneath is a description of the indicator or, in the case of Executive Opinion Survey data, the full question.

1.01 Tariff barriers (hard data)

Trade-weighted average tariff rate | 2008

This variable measures the average rate of duty per imported value unit.

Source: International Trade Centre

1.02 Non-tariff barriers (hard data)

Index of non-tariff barriers | 2007 or most recent year available

This index is constructed as the average of two NTB-related variables. The variables included are the "percentage of trade affected by NTMs" and the "average number of notifications for products affected by NTMs, for products with imports larger than 0".

Source: International Trade Centre and authors' calculations

2.01 Breadth of international markets

Exporting companies from your country sell (1 = primarily in a small number of foreign markets, 7 = in virtually all international country markets

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

2.02 Extent of regional sales

Export from your country to neighboring countries are (1 = limited, 7 = substantial and growing)

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

2.03 Openness to multilateral trade rules (hard data)

Openness to multilateral trade rules index | 2007

The "openness to multilateral trade rules index" evaluates the overall participation of countries in multilateral trade rules or instruments (MTRs). These rules are all internationally elaborated legal standards currently regulating trade in specific areas. MTRs are primarily comprised of conventions and treaties that countries ratify or accede to, and international model laws that are incorporated into national law. The index is based on ITC's LegaCarta system, which analyzes the position of each country (accession/non-accession incorporation/non-incorporation) regarding some 238 MTRs plus 450 protocols or amendments overseen by 25 different international organizations. For the purposes of this index, 40 core MTRs were selected, each rated with a score depending on its importance and relevance to trade. The 40 core instruments belong to seven categories (contracts, customs, dispute resolution, governance, intellectual property, investment, and air transport); each category is given an equal weight in the calculation of the index. Selection of the core instruments is based on their importance/relevance to trade and their universality. Importance/relevance to trade of an instrument is determined by taking into account several criteria such as the impact of its provisions on international trade (reduction of transactional costs, trade facilitation, harmonization, transparency, predictability, creation of a friendly business climate, support to private sector activities, encouragement of foreign direct investment), the opinion of international legal experts, and the views of the international bodies administering these instruments. Universality means that the selected MTRs can potentially be applied by all countries, regardless of their geographical position or economic level. For example, maritime transport conventions, however important, were not taken into account because of their weak relevance for land-locked countries; treaties dealing with securities and insider trading were not included because they do not represent a priority in countries that have not developed sophisticated financial markets. Accession to the WTO Agreements is not taken into account in this index as WTO accession does not depend exclusively on the will of a non-member State to be part of the WTO.

Source: International Trade Centre, LegaCarta Database

2.04 Share of duty-free imports (hard data)

Duty-free imports as a share of total imports | 2007

Share of trade, excluding petroleum, that is imported free of tariff duties, taking into account national tariff and preferential agreements

Source: International Trade Centre

3.01 Burden of customs procedures

Customs procedures (formalities regulating the entry and exit of merchandise) in your country are (1 = extremely slow and cumbersome, 7 = rapid and efficient)

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

3.02 Customs Services index (hard data)

Extent of services provided by customs authorities and related agencies | 2007

This index is based on 11 GEA customs barriers survey questions capturing different aspects of services offered by customs and related agencies. The services included are the following: clearance of shipments via electronic data interchange for express deliveries; full-time (24 hours a day / 7 days a week) automated processing; release of goods at the place of arrival; multiple inspections (inspections by agencies other than customs) and whether those inspections were conducted promptly; separation of physical release of goods from the fiscal control; exemptions from full customs formalities for shipments of minimal value; customs working hours adapted to commercial needs; fee for services in normal working hours; premium paid for services outside normal working hours, availability of receipt and processing of control data in advance of arrival of shipments; appeal of customs decisions to a higher level or an independent tribunal; post-release processes, pre-entry classification and valuation rulings binding on all ports; and use of reference prices or arbitrary uplifts to invoice values. The maximum score a country can obtain is 11.5.

Source: Global Express Association

4.01 Effectiveness and efficiency of clearance (hard data)

Effectiveness and efficiency of clearance process by customs and border control agencies | 2007

This variable assesses the effectiveness and efficiency of the clearance process by customs and other border control agencies in the eight major trading partners of each country. Respondents to the LPI survey were asked to evaluate the effectiveness and efficiency of clearance in the country in which they work, based on their experience in international logistics, on a 1–5 scale compared with generally accepted industry standards or practices.

Source: The World Bank, Logistics Perception Index 2007

4.02 Time for import (hard data)

Number of days required to import | 2007

The time calculation for a procedure starts from the moment it is initiated and runs until it is completed. If a procedure can be accelerated for an additional cost, the fastest legal procedure is chosen. It is assumed that neither the exporter nor the importer wastes time and that each commits to completing each remaining procedure without delay. Procedures that can be completed in parallel are measured as simultaneous. The waiting time between procedures—for example, during unloading of the cargo—is included in the measure.

Source: The World Bank, Doing Business 2008

Appendix B: The Enabling Trade Index 2008 data *(cont'd.)*

4.03 Documents for import (hard data)

Number of documents required to import | 2007

This variable takes into account all documents required import goods. It is assumed that the contract has already been agreed upon and signed by both parties. Documents include back documents, customs declaration and clearance documents, port filing documents, import licenses, and other official documents exchanged between the concerned parties. Documents filed simultaneously are considered different but with the same time frame for completion.

Source: The World Bank, Doing Business 2008

4.04 Cost to import (hard data)

Total official cost associated with importing, excluding tariffs and trade taxes | 2007

This variable measures the fees levied on a 20-foot container in US dollars. All the fees associated with completing the procedures to export or import the goods are included. These include costs for documents, administrative fees for customs clearance and technical control, terminal handling charges and inland transport. The cost measure does not include tariffs or trade taxes. Only official costs are recorded.

Source: The World Bank, Doing Business 2008

5.01 Irregular payments in exports and imports

In your country, how frequently would you estimate that firms make undocumented extra payments or bribes connected with imports and exports permits? (1 = is common, 7 = never occurs)

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

5.02 Corruption Perception Index (hard data)

Perception of the degree of corruption in each country | 2007

The Corruption Perception Index score relates to perceptions of the degree of corruption as seen by business people and country analysts, and ranges between 10 (highly clean) and 0 (highly corrupt).

Source: Transparency International

6.01 Airport density (hard data)

Number of airports per million population | 2006

Source: International Air Transport Association, SRS Analyser

6.02 Transshipment connectivity index (hard data)

Type of transshipment connections available to shippers from each country on bilateral routes | 2006

This index aims at reflecting the geographical aspects of the liner service supply and it is based on the type of connections between countries ranging from a first- to a fourth-order connection. In the absence of direct liner shipping between two countries, the cargo will have to be transshipped in a port of a third or even fourth country in order to reach the destination country. A first-order connection is a connection without transshipment, a second-order connection is a connection with one transshipment, and so on. First-order connections have the most positive impact on cargo movement. Therefore, the type of connections per country has been weighted as follows: First-order connections are multiplied by 1.0, second-order connections by 0.5, third-order connections by 0.33, and fourth-order connections by 0.25. The index is the sum of the four connection types.

Source: UNCTAD, Transport Section, Trade Logistics Branch

6.03 Paved roads (hard data)

Paved roads as a percentage of total roads | 2004

Paved roads are those surfaced with crushed stone (macadam) and hydrocarbon binder or bituminized agents, with concrete, or with cobblestones. This indicator shows paved roads as a percentage of all the country's roads, measured in length.

Source: The World Bank, World Development Indicators 2007, International Road Federation, World Road Statistics 2006

6.04 Road congestion (hard data)

Motor vehicles per kilometer of road | 2004

Source: The World Bank, World Development Indicators 2007

6.05 Quality of air transport infrastructure

Passenger air transport in your country is (1 = infrequent, limited, and inefficient, 7 = as frequent, extensive, and efficient as the world's best)

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

6.06 Quality of railroad infrastructure

Railroads in your country are (1 = underdeveloped, 7 = as extensive and efficient as the world's best)

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

6.07 Quality of roads

Roads in your country are (1 = underdeveloped, 7 = extensive and efficient by international standards)

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

6.08 Quality of port infrastructure

Port facilities and inland waterways in your country are (1 = underdeveloped, 7 = as developed as the world's best) | *For landlocked countries, this measures the ease of access to port facilities and inland waterways.

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

7.01 Liner Shipping Connectivity Index (hard data)

Quantity of services provided by liner companies | 2007

The Liner Shipping Connectivity Index (LSCI) is an indicator of liner shipping connectivity, based on indicators of service supply per country. The index is comprised of a list of quantitative indicators for service parameters available in each country. The variables included in this index are: number of ships, liner companies, liner services, TEUs (twenty-foot equivalent units) capacity, and maximum ship size.

Source: UNCTAD, Transport Section, Trade Logistics Branch

7.02 Ease and affordability of shipment (hard data)

Ease and affordability of arranging international shipments | 2007

This variable assesses the ease and affordability associated with arranging international shipments. Respondents to the LPI survey were asked to evaluate the ease and affordability associated with arranging international shipments to or from eight countries (major trading partners) with which they conduct business. Performance was evaluated using a 5-point scale (1 for the lowest score, 5 for the highest), based on their experience in international logistics and in accordance with generally accepted industry standards or practices.

Source: The World Bank, Logistics Perception Index 2007

Appendix B: The Enabling Trade Index 2008 data *(cont'd.)*

7.03 Competence of the logistics industry (hard data)

Competence of the local logistics industry (e.g., transport operators, customs brokers) | 2007

This variable evaluates the competence of the local logistics industry. Respondents to the LPI survey were asked to evaluate the competence of the local logistics industry in the eight countries (major trading partners) with which they conduct business. Performance was evaluated using a 5-point scale (1 for the lowest score, 5 for the highest), based on their experience in international logistics and in accordance with generally accepted industry standards or practices.

Source: The World Bank, Logistics Perception Index 2007

7.04 Ability and ease of tracking (hard data)

Ability to track and trace international shipments | 2007

This variable assesses the ability to track and trace international shipments (consignments). Respondents to the LPI survey were asked to evaluate the ability to track and trace international shipments (consignments) when shipping to or from eight countries (major trading partners) with which they conduct business. Performance was evaluated using a 5-point scale (1 for the lowest score, 5 for the highest), based on their experience in international logistics and in accordance with generally accepted industry standards or practices.

Source: The World Bank, Logistics Perception Index 2007

7.05 Timeliness of shipments in reaching destination (hard data)

Frequency of shipments reaching the consignee within the scheduled delivery time | 2007

This variable assesses how often shipments reach the consignee within the scheduled delivery time. Respondents to the LPI survey were asked to evaluate the timeliness of shipments in reaching destination when arranging shipments to eight countries (major trading partners) with which they conduct business. Performance was evaluated using a 5-point scale (1 for the lowest score, 5 for the highest), based on their experience in international logistics and in accordance with generally accepted industry standards or practices.

Source: The World Bank, Logistics Perception Index 2007

7.06 Postal service efficiency

Do you trust your country's postal system sufficiently to have a friend mail package worth US$100 to you? (1 = not at all, 7 = yes, trust the system entirely) | 2005

Source: World Economic Forum, Executive Opinion Survey 2005

8.01 Firm-level technology absorption

Companies in your country are (1 = not able to absorb new technology, 7 = aggressive in absorbing new technology)

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

8.02 Mobile telephone subscribers (hard data)

Mobile telephone subscribers per 100 population | 2006 or most recent year available

The term subscribers refers to users of mobile telephones subscribing to an automatic public switched telephone network using cellular technology. This can include analogue and digital cellular systems but should not include noncellular systems. Subscribers to fixed wireless, public mobile data services, or radio paging services are not included.

Source: International Telecommunication Union, World Telecommunication Indicators 2007

8.03 Broadband Internet subscribers (hard data)

Total broadband Internet subscribers per 100 population | 2006 or most recent year available

The International Telecommunication Union considers broadband to be any dedicated connection to the Internet of 256 kilobits per second (kb/s) or faster, in both directions. Broadband subscribers refers to the sum of DSL, cable modem, and other broadband (for example, fiber optic, fixed wireless, apartment LANs, satellite connections) subscribers.

Source: International Telecommunication Union, World Telecommunication Indicators 2007

8.04 Internet users (hard data)

Internet users per 100 population | 2006 or most recent year available

Internet users are people with access to the worldwide network.

Source: International Telecommunication Union, World Telecommunication Indicators 2007

8.05 Telephone lines (hard data)

Main telephone lines per 100 population | 2006 or most recent year available

A main telephone line is a telephone line connecting the subscriber's terminal equipment to the public switched telephone network and that has a dedicated port in the telephone exchange equipment.

Source: International Telecommunication Union, World Telecommunication Indicators 2007

9.01 Ease of hiring foreign labor

Labor regulation in your country (1 = prevents your company from employing foreign labor, 7 = does not prevent your company from employing foreign labor)

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

9.02 Openness of bilateral Air Service Agreements (hard data)

Index of openness of bilateral Air Service Agreements | 2005

This index measures the average openness of all bilateral Air Service Agreements (ASAs) concluded by International Civil Aviation Organization (ICAO) signatories as registered in ICAO's World's Air Services Agreements (WASA) database (2005 update), weighted by bilateral scheduled passenger traffic taking place under each ASA. Regulatory data come from ICAO's WASA database (2005) and traffic data were obtained from IATA.

Source: World Trade Organization

9.03 Prevalence of foreign ownership

Foreign ownership of companies in your country is (1 = rare, limited to minority stakes, and often prohibited in key sectors, 7 = prevalent and encouraged)

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

9.04 Business impact of rules on FDI

In your country, rules governing foreign direct investment are (1 = damaging and discourage foreign direct investment, 7 = beneficial and encourage foreign direct investment)

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

10.01 Reliability of police services

Police services (1 = cannot be relied upon to protect businesses from criminals, 7 = can be relied upon to protect businesses from criminals)

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

10.02 Business costs of crime and violence

The incidence of common crime and violence (e.g., street muggings, firms being looted) (1 = imposes significant costs on businesses, 7 = does not impose significant costs on businesses)

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

10.03 Business costs of terrorism

The threat of terrorism in your country (1 = imposes significant costs on business, 7 = does not impose significant costs on business)

Source: World Economic Forum, Executive Opinion Survey 2006, 2007

CHAPTER 1.6

Enhancing Competitiveness in Four African Economies: The Case of Botswana, Mauritius, Namibia, and Tunisia

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The recent optimistic picture of Africa's economic development is being undermined by the global economic crisis. Although the initial effects of the crisis were slow to materialize in Africa, its impact is now being felt throughout the continent; this chapter considers the impact on four African countries. Because their competitiveness is still lagging behind that of other regions, most African countries will find it more difficult than others to cope with external shocks.

The small size of most African economies, with close to half of the countries having a population of less than 10 million, is often cited as a major constraint to their economic development. But a small size is not necessarily a cause for failure. Experience elsewhere shows that in small countries it is often easier to implement reforms and changes in policy. There are many well-run small countries that have developed quickly and that are at the top of world rankings; these include the Nordic countries, Singapore, Switzerland, and so on.

In Africa, this principle is well illustrated by a few countries that have adopted development strategies with pragmatic policies promoting efficient market mechanisms. For instance, the economic performances of Botswana, Mauritius, Namibia, and Tunisia show that smallness may compel the business community to compete globally and governments to build efficient institutions that promote private-sector development. These four economies have recorded good macroeconomic performances and are classified as middle-income economies in spite of their meager share of the continent's gross domestic product (GDP) and natural resources. Unlike most of the larger economies on the continent, these countries are among the few in Africa that are relatively well ranked among the top 100 in the World Economic Forum's Global Competitiveness Index and in the World Bank's *Doing Business 2009* report. In addition, they have maintained social and political stability over the years. The four countries can provide lessons to a host of other small economies in Africa, which include some of the resource-rich countries. However, with globalization and the emergence of big economies such as China and India, they face new challenges and opportunities.

This chapter analyzes the recent competitiveness performance of Botswana, Mauritius, Namibia, and Tunisia, as well as the main factors driving their competitiveness, some of which are discussed in Chapter 1.1. The analysis shows that economic policy has been a key explanatory feature of their competitiveness. The use of an active exchange rate policy and sound, credible,

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and predictable state institutions are identified as the main pillars of these countries' competitiveness. An active exchange rate policy has helped Mauritius and Tunisia, in particular, to maintain their international competitiveness. Sound institutions have been a decisive factor in reducing transaction costs and promoting innovation in these countries. Credible and predictable state institutions have encouraged entrepreneurship and supported the development process.

An important lesson from these four countries is their long-run holistic vision of development. This orientation of economic policy was supported by strong and visionary political leaders (see Box 1) where the state played an important role. They constitute a counter example to the commonly held view that African states are typically weak. Successes in Botswana and Namibia indicate that the Dutch disease or "resource curse" can be avoided. Mauritius and Tunisia illustrate that the state can promote manufacturing diversification and seize opportunities, such as partnership with the European Union. The relative success of the four economies suggests that the functioning of the market is underpinned by sound state institutions.

Going forward, these four countries need to diversify their economies. This would require new efforts to develop the productive base in the context of both a global economic slowdown and acute competition from other emerging economies. The four countries have to make further efforts to improve their competitiveness position in a number of areas. These include:

- **Market size:** These countries face the problems of small markets in their strategy to intensify exports and regional integration. They therefore need to make more investments in infrastructure to promote regional trade and integration.

- **Labor force:** They must improve the employability of the labor force by raising the quality of training and matching training programs to the needs of the labor market. They need to deregulate the labor market without endangering social stability.

- **Bank financing:** They must facilitate access to bank financing to supplement family and short-term financing, and must encourage investment and the restructuring of certain sectors with potential economies of scale.

This chapter has six sections. The following section examines how the four countries promoted economic growth while maintaining macroeconomic stability. The third section pursues two objectives. First, we draw attention to some exogenous factors of the domestic or external environment that have contributed to the country's long-run performance. Second, we investigate the specific role of economic policy, especially the exchange rate regime and inflation control. But getting the prices right is not enough; the fourth section examines the role of institutions for business environment and firm productivity. The four countries are compared with four other non-African middle-income countries. The fifth section draws the main lessons learned as well as challenges confronting the four countries, and the final section presents conclusions to be drawn.

Economic performance of the four countries

African countries strive to achieve sustainable growth based on solid domestic foundations. This principle is highlighted by the current global crisis, which threatens to undermine the gains that many countries have made over the past five years. Sound economic policies are important for competitiveness for both resource-rich and resource-poor economies.

Botswana and Namibia: Beyond the benefits of factor endowments

Botswana and Namibia are naturally resource-rich economies with arid climates, small populations, and low densities. Both are highly dependent on the mining sector. Botswana is the largest diamond producer in the world. The diamond sector accounts for more than one-third of Botswana's GDP, over 45 percent of government revenue, and more than 75 percent of export earnings (see Appendix B).

At independence in 1966, Botswana was one of Africa's poorest countries. It had a weak human capacity (22 university graduates), few assets, underdeveloped infrastructure (12 kilometers of paved road), and an abattoir as the only "industry."[1] Over the last three decades, Botswana has recorded an impressive economic growth rate—one of the highest in the world. Performance slowed down during the 1999–2007 period, but per capita GDP still grew at about 5 percent a year, with diamond production being a significant driver of economic growth.

Botswana's exports are sufficient to finance its imports while sustaining a gross domestic savings rate exceeding 50 percent of GDP. The country spent its revenues productively, investing surpluses abroad. The flip side of high savings has been moderate pressures on demand and thus inflation, as well as low indebtedness (Table 1). Imports of capital goods, necessitated by high investment rates, have increased much more in Botswana than in other African countries, a number of which, in fact, experienced a decline in investment and savings after 1970. In Botswana, savings and investment ratios have been above the African average and have contributed to the recorded high growth rates.

Botswana's manufacturing sector has declined over time, dropping from 8 percent of GDP in 1966 to less than 4 percent in 2007, mainly as a result of the growth of the mineral sector. Gains made during the diamond

Box 1: Examples of Pragmatic Leadership

Sir Seretse Khama (1921–80): Founding President of Botswana, 1966–80

In Africa, visionary leadership can make all the difference. Sir Seretse Khama, first President of Botswana, is such an outstanding example. He inherited an impoverished and internationally obscure state from British rule and left an increasingly democratic and prosperous country with a significant role in Southern Africa. Botswana's superior economic performance can be attributed in part to good leadership under Sir Seretse Khama and subsequent leaders. Under Sir Seretse Khama, Botswana enjoyed one of the highest economic growth rates in the world combined with a stable and democratic political system. This was in sharp contrast to the rather modest economic growth performance posted by most other African countries. Worse still, many of these countries became embroiled in pernicious internal or interstate wars—but not Botswana.

Though Botswana came to be described as a "paternalist democracy" under the dominance of one political party, it has succeeded in establishing itself as both prosperous and peaceful. Between 1966 and 1980 Botswana had the fastest-growing economy in the world. It also came to be seen as a remarkable state with high principles, upholding liberal democracy and non-racialism in the midst of a region embroiled in civil war, racial enmity, and corruption. State mineral revenues were invested in infrastructure development, education, and health, and in subsidies to cattle production. The result was a great increase in general prosperity, in rural as well as urban areas, though with inequities that were to become increasingly apparent after the death of Sir Seretse Khama.

As the leader of a black majority–ruled state bordering an apartheid South Africa, Sir Seretse Khama exhibited impressive diplomatic skills in combining a pragmatic recognition of vulnerability in relation to a powerful neighbor with a foreign policy based on strong moral principles and an opposition to racism. Sir Seretse Khama also emerged as a respected international statesman and a voice for moderation. At home, he was able to balance freedom of expression with strong political authority. One of his great legacies was strong institutions for robust economic growth and social stability. He set high standards of personal leadership for his successors to emulate.

"In his last years, Seretse Khama looked increasingly outwards and onwards. He was one of the 'Front-Line Presidents' who negotiated the future of Zimbabwe and Namibia. He developed a vision of the future of Southern Africa after colonialism and apartheid, as a peaceful, democratic and prosperous region. He was thus the key founder of what has since become the Southern African Development Community."[1]

Sir Seewoosagur Ramgoolam: First Mauritian Prime Minister

Born into a poor Hindu family, Sir Seewoosagur Ramgoolam qualified as a medical doctor in Britain. He joined the Mauritius Labour Party in 1953, becoming its leader in 1958; he was the leading figure in the movement demanding an end to British colonial rule in Mauritius. At the country's independence in 1968, he became its first Prime Minister. Under his rule, Mauritius was marked by democracy, stability, and significant levels of economic growth. A skillful politician, he was successful in dealing with the racial, ethnic, and religious cleavages within the Mauritian political system. In 1973, he was awarded the United Nations prize for Human Rights. From 1976 to 1977, he chaired the Organization of African Unity (OAU).

Following defeat in the 1982 elections, he stepped down in favor of the opposition (the first leader of an African state to do this). In 1983 he was appointed to the largely ceremonial position of Governor-General. A quiet and unspectacular political leader, he laid the solid foundations of modern Mauritius.

During his years in public service, particularly those when he was Prime Minister after independence was achieved, Ramgoolam realized the dreams he had had for his people as a young man. With the University of Mauritius, he offered universal education; he opened hospitals and created village councils; built housing for workers; and instituted old age pensions, along with family allowances, widows' pensions, and a national pension plan. Workers also began to enjoy the benefits of workers in other democratic countries, from electricity in their homes to trade unions that moderated wages and employee benefits such as sick leave and holiday pay. He helped oversee the building of banks, hotels, industries, and an airport that would come to bear his name, honoring him even in death.

Source: Parsons, 1999; Mogae, 2008; http://www.answers.com/topic/seewoosagur-ramgoolam.

Note

1 Parsons 1999.

Table 1. Macroeconomic performance of Botswana, Mauritius, Namibia, and Tunisia

	BOTSWANA				MAURITIUS				NAMIBIA				TUNISIA			
Average annual growth	2000–07				2000–07				2000–07				2000–07			
GDP (%)	5.2				3.5				5.0				4.8			
Year	2006	2007	2008e	2009p	2006	2007	2008e	2009p	2006	2007	2008e	2009p	2006	2007	2008e	2009p
GDP (%)	5.1	4.4	3.9	2.6	3.9	5.4	4.8	3.0	7.1	4.1	3.4	2.7	5.5	6.3	5.1	4.1
Consumer prices (%)	11.6	7.1	12.6	9.2	8.9	8.8	9.8	6.5	5.0	6.7	10.3	8.6	4.5	3.1	5.0	2.9
GDP (%)	2007				2007				2007				2007			
Agriculture	2.1				5.3				10.1				11.4			
Industry	51.2				26.1				35.5				35.3			
Manufacturing	3.9				18.9				16.8				18.8			
Services	46.6				68.6				54.4				53.3			
GDP (%)	2007				2007				2007				2007			
Gross capital formation	26.9				26.9				20.9				24.8			
GDP (%)	2007				2007				2007				2007			
Exports of goods (f.o.b.)	42.3				29.5				33.5				42.6			
Year	2006	2007	2008e	2009p	2006	2007	2008e	2009p	2006	2007	2008e	2009p	2006	2007	2008e	2009p
Current account balance (GDP %)	17.2	16.6	13.5	11.5	–9.4	–5.3	–9.9	–6.1	13.9	18.0	3.6	2.7	–2.0	–2.6	–4.2	–3.2
Public finance overall (+)/(–) (GDP %)	13.2	6.5	–0.3	–0.5	–5.3	–4.3	–3.4	–3.2	4.1	0.9	–3.6	–3.4	–2.7	–2.8	–3.0	–3.2
GDP (%)	2008				2008				2008				2008			
Total debt outstanding	11.9				8.9				29.9				49.6			

Source: AfDB Statistics Department; *African Economic Outlook,* March 2009.
Note: *e* is estimate and *p* is projection.

boom could decline in the future through decreasing export volumes and, as seen currently, because of the global slowdown. As underlined by the recent scaling up of exploration by private companies, uncertainty prevails around diamond resources. Diamond production is expected to increase from 32 million carats in 2005 to 44 million carats in 2017. However, production is expected to decrease after 2017. In the worst-case scenario, Botswana's diamond reserves could be depleted by 2029.[2] The risk around diamond production, together with the need to increase formal employment,[3] is a strong argument in support of the need to diversify the economy. Diversification is on the government's agenda and will continue to be the main challenge in the future beyond the country's Ninth Development Plan (2003–09).

Health and the quality of education are also important for improving competitiveness. In Botswana, enrollment at all levels of education has increased steadily since independence. Enrollments in primary education are still lower in the remote western and northwestern districts than in other areas of the country, but performance of enrollment is already impressive. In 2007, the gross primary enrollment rate (108 percent) and the literacy rate of the population older than 15 years (82.8 percent) is significantly higher than the average sub-Saharan ratios (see Appendix C). However, the high prevalence of HIV/AIDS in Botswana, in addition to its adverse social and human effects, has severe negative impacts on labor productivity and on the country's competitiveness.

Namibia is a small economy closely integrated with that of South Africa. In 2007, it recorded moderate economic growth in spite of a strong performance in diamond production. GDP growth averaged 5.0 percent over the period 1999–2007, and declined to 3.4 percent in 2008. This trend partly reflects the country's ability to benefit from favorable international specialization and partly reflects the first gains from diversification. Under Vision 2030, the Namibian government expects to transform the country into an industrialized and competitive economy. The mining industry accounts for 9 percent of GDP, 45 percent of export earnings, and a third of fixed capital formation. As in Botswana, diamonds are important—Namibia is among the 10 largest exporters of diamonds, which represents 90 percent of the GDP share of the mining sector. In 2006, diamonds accounted for 40 percent of exported goods and other minerals (copper, zinc, uranium, and gold) accounted for 18 percent, against 15 percent in 2003.

In 2007, manufacturing activities accounted for about 17 percent of GDP in Namibia. In recent years, more diamond was extracted as its price increased. The higher price and volume contributed to a high current account surplus of 7 percent of GDP in 2008 and higher economic growth. Several initiatives have been undertaken to expand the export base; these have met with some success after 2003. The production of grapes, one of Namibia's nontraditional exports, has more than tripled in the last decade. The country's main industry is fish processing. Most other manufacturing activities, especially textile, suffer from strong competition from Asian countries. Namibia is also promoting tourism as part of its diversification efforts.

Namibia's fiscal surplus reached 1.9 percent of GDP in fiscal year 2007.[4] Thanks to efficient government management, the country's total outstanding debt ratio has been limited to less than 20 percent of GDP in the recent past, although it rose to 30 percent in 2008. In 2006, gross capital formation in Namibia was the highest among the four countries, with a ratio of 27 percent of GDP. Inflation has been kept at about 10 percent during the last three years. Pegging the Namibian dollar to the South African rand has helped to manage inflation by linking monetary policy to South Africa's targeting framework. Inflation pressures are a little higher in Namibia than they are in South Africa. One potential explanation of the small nominal differential can be seen in the Balassa-Samuelson effect.[5] As productivity increases, wages and prices of non-tradable goods tend to increase, causing a real appreciation of the domestic currency. Productivity growth in Namibia is also higher than in South Africa.

Namibia ranks 5th in the continent in terms of per capita income and 11th in the Human Development Index. Therefore, like Botswana, Namibia's social indicators reflect its long-run economic performance. High rates of unemployment and poverty reflect the country's challenge in achieving shared growth. Formal wage employment accounts for less than half of the workforce. According to the Labor Force Survey, the official unemployment rate is about 20 percent. If "discouraged people"—those who are not currently employed but who have stopped looking for work—are included, the rate is as high as 54 percent.

With 85 percent of its adult population being literate, Namibia has one of the highest rates in sub-Saharan Africa. Various informal adult education programs have been implemented to enhance literacy levels. Beyond good socioeconomic performance, real problems exist, especially in poverty and health. Most Namibians are poor, with about half of the population living below the poverty line. Undernutrition and malnutrition are still problems, especially for young children. In Namibia, as in Botswana, HIV/AIDS prevalence is among the highest in the world. Life expectancy at birth in Botswana is low—about 51 years in 2007 (see Appendix C). This is 20 years less than the average in upper-middle-income countries.

Mauritius and Tunisia: Success and competitive pressures

Both Mauritius and Tunisia have more diversified economies than Botswana and Namibia. Mauritius has one of the highest population densities in the world (610 inhabitants per square kilometer). In Mauritius, the export processing zone (EPZ) concentrates on labor-intensive production of goods for the export market, with key products being textile, electronics, plastics, and leather. Tunisia began to diversity its economy after the 1970s, making new investments in mechanical and electro-mechanical equipment as well as in textile, which accounts for about a quarter of all manufacturing operations.

Mauritius has had one of the most striking development stories in Africa. The past 40 years have proved Meade et al.'s initial forecast—that Mauritius was doomed—wrong.[6] Meade et al. rightly perceived that Mauritius faced severe constraints. Some of these constraints included the country's low initial level of income, its dependence on sugar exports, its rapid population growth, potential ethnic tensions among a very diverse population, and its geography. Mauritius is also geographically disadvantaged by being at least 25 to 30 percent farther from world markets than the average African country.

From 1973 to 1999, real GDP grew at an average rate of 6 percent annually, compared with less than 2.5 percent average for sub-Saharan Africa. The income of the average Mauritian has more than tripled over a 40-year period, while that of the average African has increased by only 32 percent. High growth rates (Table 1) have been achieved in a stable macroeconomic environment, with low inflation (less than 10 percent over the recent period).

However, although Mauritius has had commendable macroeconomic performance, the economy is now under heavy pressure from globalization. The loss of trade preferences for its textile exports in 2005, reform in the European Union's sugar protocol (2006–10), and high international oil prices have adversely affected Mauritius' terms of trade. Growth has fallen over the past few years, reflecting a marked contraction of activities in the EPZ, dominated by textile. These changes have led to rising unemployment. The current account surplus has recently turned into a deficit, reaching 5.2 and 6.7 percent of GDP in 2007 and 2008, respectively (Table 1). Two main reasons for this drop are lower exports and high oil and food prices. Low growth and high fiscal deficits have fueled an increase in public debt, and a slow adjustment in consumption behavior is contributing to a widening of the current account deficit and increasing external vulnerability.

Real GDP growth is projected to remain below the past decade average during the next five years, even with

the assumption that a significant part of the competitiveness of the textile and sugar sectors is restored. Because of the various shocks, new sectors—in particular, information and communication technologies (ICT)—should be promoted to sustain high growth and create jobs in the medium term. The success of such a strategy is crucial for Mauritius' capacity to enhance its competitiveness.

The quality of human resources is a strong positive argument for the development of Mauritius. More than 90 percent of all children of primary-school age receive primary education, the gross primary enrollment rate is 102 percent, and secondary education is of high quality. Life expectancy at birth increased from 61 years in 1965 to 73 years in 2007 (see Appendix C).

The Tunisian economy is much more diversified and closer to European markets than the three others. Tunisia is among the best performers in Africa. Strong real GDP growth, averaging 5 percent over the past decade, accelerated in 2007 to reach 6.3 percent. The economy is estimated to have grown by 5.1 percent in 2008, thanks to the dynamism of agricultural output and the expansion of both services and non-textile manufacturing activities.

Tunisia has maintained inflation rates between 3 and 5 percent over the last years. Factors influencing inflation include oil and basic commodities prices as well as dynamic domestic demand. The nominal depreciation of the Tunisian dinar against the euro and the US dollar has helped the real adjustment of the tradable sector. Indeed, by reducing firms' domestic costs expressed in foreign currency, a more flexible exchange rate policy has played a significant role in allowing producers to adapt to a more competitive environment both domestically and in international markets.

The current account deficit in Tunisia has remained small in recent years. In spite of exogenous shocks, in 2006, the balance of payments recorded a large surplus owing to the partial privatization process of Tunisie Télécom, one of the country's largest national firms. At the end of 2006, foreign exchange reserves were equivalent to five months of imports. In the past, significant foreign borrowing by the government contributed to an external debt of more than 65 percent of GDP, quite a high ratio compared with those observed in other middle-income countries. The total debt outstanding ratio declined to 49.6 percent in 2008, and a debt sustainability analysis suggests that the Tunisian economy has a limited vulnerability to the financial impact of the debt service. Beyond the debt issue, Tunisia has shown resilience in the face of the surging prices of oil and other imported commodities, sustaining relatively strong growth while maintaining macroeconomic stability. Tunisia has been recognized by *The Global Competitiveness Report* (GCR) as the most competitive country within the region, and it benefits from a good perception among international rating agencies.

Education is free to all school-age children in Tunisia, and schooling is compulsory between the ages of 6 and 16. Virtually all children are enrolled in primary education, and nearly one-sixth of its young people proceed to universities or institutes of higher learning. About three-quarters of the population is literate; the rate among men is somewhat higher than that among women, but the gap is narrowing.

Although the educational systems are quite advanced in both Tunisia and Mauritius, more needs to be done in the educational system to support and deepen the diversification process of the economy and to reduce the unemployment rate. In Tunisia in particular there have been recent concerns about the high unemployment rate of university graduates (see Box 2). There is a need to address the labor market mismatch while at the same time ensuring a throughput of high-quality university graduates with operational skills.

Factors underlying macroeconomic performance of the four countries

The long-run macroeconomic performances of the four countries have been influenced by a combination of exogenous factors (e.g., natural resources endowments and external agreements) and sound policies. Among the policy instruments discussed in this section, the exchange rate regime is given special attention, as it has a direct impact on relative prices and costs. Although Botswana and Namibia did not succumb to the Dutch disease, Mauritius and Tunisia supported exchange rate flexibility that facilitated the gradual removal of import quotas and tariffs as well as confronting the growing competition in external markets for some critical sectors such as textiles.

Management of exogenous factors

In Botswana, diamond production and abundant natural resources contributed significantly to the high and sustainable performance of its economy. But if Botswana benefited from its natural resource endowments, it cannot be ignored that elsewhere similar opportunities have resulted in poor outcomes. In many countries, the abundance of natural resources has been a curse rather than a blessing and has led to poor governance and a lack of public-sector accountability. As a result, policy implementation has been weakened, and, in a number of cases, conflicts and civil wars have arisen because of rent seeking. In Botswana and in Namibia, minerals have provided a base for strong economic growth and have not constrained the production of other tradables. Thanks to sound monetary and fiscal policies, Botswana and Namibia maintained their inflation at the level of South Africa.

Both Mauritius and Tunisia have benefited from windows of opportunities—especially trade preferences offered by the European countries—that allowed them

Box 2: Competitiveness and the labor market in Tunisia

Tunisia has had impressive macroeconomic performances over decades. But the country still struggles with a persistent and high unemployment rate. Unemployment is particularly severe for first-time jobseekers, with the rate hitting 30 percent for highly educated people under 30. Although the educational system is generally considered to be one of the best in Africa, its quality is now under criticism. There is need to undertake significant reforms in all segments—from secondary schools to university, including vocational training. To overcome all these problems, the government has embarked on a series of policies that touch on the issues of labor demand, skills supply, and the mediation between the two.

Recent evidence about the situation and the impact of current policies supports the position that labor demand appears to be constrained both by the high cost of capital and by barriers to formal markets. Opening the banking sector to more domestic and foreign competition is an important first step; this process should be continued. To the extent that private banks become more competitive and serve their customers better, the large and complex public provision of development banking and investment subsidies could begin to cease. A corresponding review of this area is already underway. Rather than making the incentives of the subsidy and tax relief system more complex, it might make sense to review the overall corporate tax system in the medium term.

The skills supplied by the educational system do not fully meet the demand of the labor market in part because the system has difficulty responding. A planning of future higher education policies, consistent with the above evidence, would include attenuating the immediacy of the baccalaureate-university link in the short term; institutionalizing the spirit of the recent higher education law in legal decrees, and promoting both the contractual autonomy of universities and their external public evaluation. In vocational education and training, the government has already embarked on all policies of relevance; it is now only a question of pushing the roll-out of the envisaged measures.

Regarding regulatory liberalization, the government should be commended for the components of the new law on economic initiative, which improves the speed and accountability of startup procedures. The imminent decrees will realize the law in the medium term. Also in the short to medium term, it is in Tunisia's interest to increase the ease and transparency of access to independent professional activity, especially for lawyers and accountants. Regarding the way wages are determined, the collectively agreed wage scales appear to contribute to graduate unemployment. Wage floors by qualification, including floors for university degrees, seem to be too high for the labor market to accommodate the current rising number of graduates. The government could pursue the debate already begun on liberalizing the hiring options for firms, including allowing private employment mediation and temporary employment agencies. In the short run, the issues raised by the Convention Collective could be addressed. Most probably, subsidies could be saved and employment improved by liberalizing graduate entry wages.

Source: World Bank. MENA "Labor Demand, Skills Supply and Employment: Towards an Integrated Strategy for Job Creation" A Policy Note. 2008.

to tap into world markets. For example, in both Mauritius and Tunisia, the garment and textile industries—a key sector for their economic growth—benefited from the Multi Fiber Agreement (MFA) until 2005. In Tunisia, textile still represents about 5 percent of the production in industries and services. Under the MFA, European Union (EU) markets assigned country-specific quotas for Asian exports while these markets were totally open to Tunisia's and Mauritius's textile exports.

After independence in 1968, Mauritius secured quotas for its sugar exports to the European Union at a price that was, on average, 90 percent above the market price between 1977 and 2000. The resulting rents were used by Mauritius to finance capital accumulation. Economic growth was also supported by efficient economic policies. In Mauritius, the trade and development strategy supported export growth at an annual rate of 7.1 percent over the period 1986–96. Import substitution promoted the initial diversification of the manufacturing sector, as the government made significant efforts to progressively open the economy. Trade protection was high, with average tariff rates exceeding 100 percent in 1980 and about 65 percent in 1989. Until the 1980s, extensive quantitative restrictions applied in the form of import licensing, which covered nearly 60 percent of imports.

The Mauritius EPZ was established in 1971. All imported inputs were duty-free for EPZ companies, with the objective of supporting the export sector's competitiveness. Tax incentives were also provided to EPZ firms, while EPZ employers benefited from greater flexibility to adjust labor in accordance with the output requirement. The MFA allowed Mauritius to benefit from international import redistributions and attracted Hong Kong entrepreneurs who sought overseas locations for their textile operations in an attempt to circumvent textile quotas. The EPZ, which accounts for 25 percent of GDP and more than 36 percent of employment, facilitated foreign direct investment and productivity growth. During the period 1983–99, total factor productivity (TFP) growth in the EPZ averaged about

3.5 percent a year, compared with 1.4 percent in the economy as a whole. The preferential access granted by Mauritius' trading partners in the sugar, textile, and clothing sectors (90 percent of total exports) amounted to an implicit subsidy of the tradable sector.

Tunisia launched a structural adjustment policy in 1983. The economy's outward orientation intensified notably through the 1995 Association Agreement with the European Union, although the average tariff was still higher than the world's rate (9.8 percent) or sub-Saharan Africa averages (13.7 percent). However, the effective protection that increased from 56 percent in 1995 to 71 percent 1997 declined to 26 percent in 2005. Since January 1, 2008, trade in industrial products with the European Union has been fully liberalized, and EU industrial products enter Tunisian markets duty-free. A restructuring program has allowed firms to adjust efficiently. The maximum customs duty on imports of manufactured products from the European Union was less than 10 percent in 2007, compared with over 100 percent in 1995. In 2005, the industry was faced with the expiration of the MFA and the potential trade diversion attached to this loss of preferential access to external markets. Within the clothing sector, which accounts for about 40 percent of the manufactured value-added in Tunisia, the government and firms tried to move away from subcontracting to joint-contracting. In addition, the government promoted agricultural production in such areas as olive oil and bio-culture, which are below their EU export quota levels.[7]

Exchange rate policies for price competitiveness

Relative prices or costs are important variables considered by firms that produce standardized products and compete in world markets. Although the real effective exchange rate (REER) is generally used to appraise price competitiveness, the interpretation of this index is sometimes unclear.[8] Undervalued exchange rates benefited Asian exports in the 1980s, while an overvalued currency does not necessarily hurt production of tradables because it stimulates imports of capital goods and allows productivity gains. Rodrik supports the view that an undervalued currency would boost economic growth while overvaluation would be harmful,[9] arguing that the production of tradable goods in developing countries suffers from market failures as well as institutional failures. Following this argument, real exchange rate depreciation would be a second-best option for alleviating these costs and distortions.

The REER is used to analyze its potential economic impact in all four countries (see Appendix A). With the exception of Namibia, the other three countries adopted a managed or free exchange rate regime (see Box 3). Nominal costs evolve as the consumption price index and the productivity gains are hypothesized to be similar or close across countries. Therefore, firm competitiveness deteriorates when the REER appreciates and improves when it depreciates.

Box 3: Exchange rate regime in the four countries

The Botswana pula has moved from an adjustable to a crawling peg against a basket of currencies comprising the South African rand and the special drawing rights. The new exchange rate is adjusted continuously against the basket according to factors that include the expected inflation differential between Botswana and its major trading partner countries.

Mauritian authorities chose a different option from the one generally adopted by small island economies, which very often peg their currencies to a hard currency for credibility purposes. In line with the liberalization of the capital account and gradual floating of exchange rate in the 1990s, the Central Bank of Mauritius revised its monetary policy and officially adopted a managed floating regime in 1994.

In Namibia, the rand was the domestic currency between 1921—when the South African Reserve Bank was established—and 1990. The Namibian dollar was introduced after independence in 1990, but it is pegged to the rand. According to the institutional arrangements of the Common Monetary Area (CMA), the rand freely circulates at par with the domestic currency. The Bank of Namibia has limited capacity to conduct independent monetary policy. This leaves fiscal policy as its main tool to cope with shocks. However, such a policy reacts at best only with a time lag.

In Tunisia, because of historical links and the weight of trade partners, the dinar was first anchored to the French franc and later on to the other currencies of the European Monetary System (EMS). The situation has changed over the last 10 years, with a growing role attached to a basket of currencies (including the US dollar). To some extent, and according to the IMF exchange rate regime classification, the dinar has progressively moved from a crawling peg to a managed floating one with no pre-announced path for the exchange rate.

Mauritius and Tunisia: The impact of the managed floating exchange rate policy

An active exchange rate policy has contributed to improving price competitiveness in Mauritius as well as in Tunisia. Mauritius has been able to achieve a low inflation rate, which decelerated from 10 percent over the years 1989–93 to about 8 percent in mid-1996, when it introduced an inflation-targeting regime, and 4 percent in 2004. More recently, its inflation rate has increased to the late 1980s level because of high oil and food prices, although inflation targeting has allowed it to come close to the levels observed in developed countries. The Mauritian rupee significantly depreciated. In 2008, it was less than 60 percent of its 1995 level and

allowed significant price competitiveness. These gains ranged from 10 to 20 percent between 1990 and 2006 (Table 2). The managed floating exchange rate regime has helped maintain the external competitiveness and the current account sustainability of the country. This flexibility remains very important, although the current account position has recently deteriorated (Table 1).

Tunisia has been implementing a managed exchange rate regime over the last decade. With the growing openness of the economy, this policy has become central to macroeconomic management. There has been impressive progress in the reduction the number of trade tariffs, from 14 to 9. The prudent monetary policy reduced inflationary pressures to levels close to those prevailing in the industrialized countries, which led to the real depreciation of the effective exchange rate. Indeed, the authorities are preparing to gradually open up the capital account and to meet the domestic demand for portfolio diversification through foreign financial assets. Over the medium term, greater exchange rate flexibility has been a valuable factor in strengthening the external position and in preserving price competitiveness.

Table 2: Nominal and real effective exchange rates: Two trade-weighting patterns (100 = 1995)

		Non-oil imports		Exports	
	Year	NEER	REER	NEER	REER
Botswana	1990	106.2	97.2	126.8	88.8
	1994	101.9	99.9	106.7	100.8
	1998	96.1	99.4	68.8	78.4
	2000	99.6	106.9	64.6	79.8
	2002	113.2	117.7	54.0	70.2
	2004	116.9	119.8	68.5	89.1
	2005	111.8	115.6	66.3	87.6
Mauritius	1990	96.5	94.8	107.1	93.6
	1994	99.8	100.1	99.6	98.7
	1998	88.1	94.8	77.1	86.6
	2000	90.1	103.1	79.2	94.3
	2002	87.8	106.3	69.1	87.8
	2004	75.6	94.6	64.3	84.2
	2006	65.9	89.2	55.9	78.5
Namibia	1990	102.2	98.0	117.1	90.2
	1994	100.7	99.1	104.7	100.1
	1998	97.3	98.7	77.0	85.0
	2000	96.2	105.0	71.5	87.6
	2002	93.3	108.6	53.8	74.6
	2004	96.0	116.3	64.8	94.4
	2006	95.5	115.4	62.4	91.8
Tunisia	1990	103.3	93.2	98.5	91.2
	1994	99.3	96.5	98.7	96.4
	1998	95.3	99.7	95.8	99.5
	2000	93.2	99.4	95.3	100.8
	2002	91.6	99.0	94.5	101.5
	2004	81.7	90.5	83.7	92.0
	2006	75.9	85.6	77.6	86.8

Source: Authors' calculations using *International Financial Statistics* data.
Note: Nominal and real appreciations of indexes mean a loss of competitiveness.

Botswana and Namibia: Sensitivity to the weight of the rand

Both Botswana's and Namibia's nominal effective exchange rates, as measured by the bilateral-trade shares of imports, have been strongly influenced by the South African rand. On the one hand, over the 1999–2003 period, South Africa accounted for close to 80 percent of Botswana's imports and more than 90 percent of Namibia's. On the other hand and for the same period, Botswana and Namibian exports to South Africa accounted for only 6.5 and 32 percent of their total exports, respectively. This difference explains the variation of the nominal exchange rate that has been stable in terms of the import-based REER, while it appreciated in terms of the export-based REER. To a large extent, these nominal differences have been passed on to the real evolution of the indexes. Because of the large depreciation of the rand from 1995 to 2002, the export-weighted REER depreciated strongly over this period while the import-based index was stable for Namibia but appreciated somewhat in Botswana, especially between 2000 and 2004.

In Botswana, the appreciation of the pula was a consequence of the pegged-basket system and the 40 percent depreciation of the South African rand against the special drawing rights. The pula's appreciation against the rand placed nontraditional exporters at a disadvantage and reduced Botswana's attractiveness to foreign investors compared with countries with currencies that are pegged to the rand. The International Monetary Fund suggests that the pula depreciated in nominal and real effective terms after devaluations (in 2004 and 2005) and the shift (in 2005) to a crawling peg.[10] The crawling rate of the pula is set at the difference between the inflation target and the forecasted inflation of Botswana's trading partners. Monetary policy has helped contain inflationary pressures, so that by the end of 2007 the REER was about 10 percent below its pre-2004 peak. As a result, price competitiveness has been restored to its late 1990s level.[11]

The exchange rate policy has proved to be less active in Namibia and Botswana than in Mauritius and Tunisia. The choice of the exchange rate regime may partly explain this difference, but the fundamentals of the long-run equilibrium exchange rate should also be considered. The two resource-rich countries benefited from favorable external terms of trade for minerals, while the two more diversified and resource-scarce economies chose to use their exchange rate to support exports of manufactured goods in a more competitive environment.

Institutional and business environment factors

Beyond the direct impact of prices, institutions play a central role for firm productivity and cost minimization. Indeed, by reducing transaction costs and market failures, adequate formal rules and enforcement mechanisms

shape the opportunities and incentives for firms to invest and raise productivity.

A number of factors affect the competitiveness of economies through the cost of doing business. Firms' behavior, as well as actions by public institutions, is critical to competitiveness. These factors include governance, the cost of corruption, the inability of the government to promote security, and predictability in the way business conflicts are solved. Some institutional barriers raise costs and limit "contestability" in domestic markets, ultimately undermining the Schumpeterian "creative destruction" process.

Regulations affect competitiveness notably through the rules governing the starting or the closing of a business. Barriers can also exist at the level of the input markets, such as the ease of firing and hiring workers. When contractual arrangements are set up under tight regulatory constraints, they tend to negatively affect firm competitiveness. Another element of excessive costs of doing business arises from deficiencies in the provision of public goods or public tradable services. In most developing countries, the poor quality of the roads and other infrastructural services are serious constraints to competitiveness and productivity.

The key drivers of competitiveness of the four African countries, along with the four non-African countries Thailand, Trinidad and Tobago, Uruguay, and Venezuela, are highlighted in this section. All these eight countries can be classified according to their stages of development, as defined in Chapter 1.1. While Botswana and Venezuela are in transition from stage 1 to 2, the others belong in stage 2; the exception is Trinidad and Tobago, which is in transition from stage 2 to 3 of the development process. The discussion that follows is based on information and data from World Economic Forum's *Global Competitiveness Report 2008–2009* and Chapter 1.1 of this *Report,* the World Bank's *Doing Business 2009,* and the World Bank's *Investment Climate Assessment* reports.

Table 3 gives the Global Competitiveness Index (GCI) rankings and scores for the four African countries; it shows that Tunisia (36th) has the highest rank in Africa and is close to Thailand (34th) in the 2008–2009 GCI. As for Botswana (56th), it has improved significantly, moving up a remarkable 20 places to achieve the biggest improvement in the most recent GCI. Botswana's strengths are its reliable and stable institutions that contribute to transparency and accountability of public policy and a stable macroeconomic environment. Namibia, at 80th place, driven by an adequate set of institutions protecting property rights with a judicial system perceived as independent, moved up nine places. Mauritius (57th) also had an improvement of three places since the previous *Report*. The country has strong and transparent public institutions, well protected property rights, and reasonable levels of judicial independence and security.

Table 3: GCI rankings of four African and four non-African countries

	2007–2008		2008–2009	
Country	Rank (out of 131)	Score (out of 7)	Rank (out of 134)	Score (out of 7)
Botswana	76	3.96	56	4.25
Mauritius	60	4.16	57	4.25
Namibia	89	3.85	80	3.99
Tunisia	32	4.59	36	4.58
Thailand	28	4.70	34	4.60
Venezuela	98	3.63	105	3.56
Uruguay	75	3.97	75	4.04
Trinidad and Tobago	84	3.88	92	3.85

Source: World Economic Forum, 2008.

Factors impacting the business environment

Table 4 refers to the World Bank's *Doing Business 2009* report, which provides objective measures on business regulations and their enforcement in the world. The *Doing Business* data are collected in a standardized way and offer valuable advantages, including the use of international benchmarking that potentially drives investment decisions. In Table 5, the charts of the most problematic factors for doing business presented in the Competitiveness Profiles section of this volume are considered. Respondents were asked to select the 5 most problematic out of a list of 15 factors. Information in Tables 4 and 5 is used to analyze some of the key factors that drive competitiveness of the eight economies.

Botswana ranks 38th out of the 181 economies in World Bank's *Doing Business* and 56th in the GCI. Problems related to market failure of both labor and goods (Table 5) are more serious than those related to political and administrative governance. Inefficient government bureaucracy (11.1 percent) is ranked 3rd among the most problematic factors for doing business, after work ethic in national labor force (19.0 percent) and inadequately educated workforce (14.0 percent). But the political dimension of public governance is not as problematic in Botswana as in other African countries. Botswana is ranked well on issues related to reliable and legitimate institutions that contribute to public trust in politicians, and it has the best record on anti-corruption enforcement in Africa.

The 2007 World Bank Investment Climate Assessment Survey shows that, compared with manufacturing enterprises in other sub-Saharan countries, firms in Botswana are relatively productive. Labor productivity is high: about US$8,000 per worker, more than twice that of low-income countries in sub-Saharan Africa. However, for total factor productivity (TFP), Botswana compares unfavorably both with non-African upper-middle-income countries and with regional TFP standards observed in South Africa or Namibia. Wages are higher than in China or Thailand, but lower than in

Table 4: Doing Business in four African and four non-African countries

Indicator	Botswana	Mauritius	Namibia	Tunisia	Venezuela	Trinidad and Tobago	Uruguay	Thailand
Rank out of 181 countries	**38**	**24**	**51**	**73**	**174**	**80**	**109**	**13**
GNI per capita (US$)	**5,840**	**5,450**	**3,360**	**3,200**	**7,320**	**14,100**	**6,380**	**3,400**
Starting a business								
Procedures	10	5	10	10	16	9	11	8
Duration (days)	78	6	66	11	141	43	44	33
Cost (percent GNI/capita)	2.3	5.0	22.1	7.9	26.8	0.9	43.5	4.9
Enforcing contracts								
Procedures	29	37	33	39	29	42	40	35
Duration (days)	987	750	270	565	510	1,340	720	479
Cost (percent of claim)	28.1	17.4	29.9	21.8	43.7	33.5	19.0	14.3
Closing a business								
Time (years)	1.7	1.7	1.5	1.3	4.0	No practice	2.1	2.7
Employing workers								
Difficulty of hiring index	0	0	0	28	78	0	33	33
Difficulty of firing index	40	50	20	80	100	20	0	0
Registering property								
Procedures	4	4	9	4	8	8	8	2
Days	11	210	23	39	47	162	66	2
Cost (percent of property value)	5.0	10.8	9.9	6.1	2.2	7.0	7.1	1.1
Getting credit								
Legal rights index	7	5	8	3	3	8	5	4
Credit information index	4	3	5	5	0	4	6	5
Protecting investors								
Investor protection index	6.0	7.7	5.3	3.7	2.7	6.7	5.0	7.7
Paying taxes								
Payments number	19	7	37	22	70	40	53	23
Time (hours)	140	161	n/a	228	864	114	336	264
Total tax rate (percent profit)	17.1	22.2	25.3	59.1	56.6	33.1	58.5	37.8
Trading across borders								
Documents for export (number)	6	5	11	5	8	5	10	4
Time for exports (days)	31	17	29	17	49	14	19	14
Cost to export (US$ per container)	2,508	725	1,686	733	2,590	866	1,100	625
Documents for imports (number)	9	6	9	7	9	6	10	3
Time for imports (days)	42	16	24	23	71	26	22	13
Cost to import (US$ per container)	3,064	677	1,813	858	2,868	1,100	1,330	795

Source: World Bank, 2008.

most of the Southern Africa Customs Union (SACU) economies or Mauritius. The unit labor cost (e.g., the ratio of the average labor costs to value-added) is not a serious constraint on competitiveness. The World Bank's Enterprise Survey also shows that access to finance is a severe constraint for about 60 percent of micro-enterprises and 40 percent of larger organizations.

The quality of labor is one of the constraints to businesses in Botswana, although the number of years of schooling of a typical worker in the median firm in that country is quite high. The problem is related to the relevance of the curriculum in formal institutions of learning. Other constraints relate to infrastructure and starting a business. The four African economies are ranked relatively well on issues concerned with macroeconomic policy stability and political stability as compared with the four non-African countries. In Botswana, trading across borders is expensive. Because of the distance to markets, the cost to import (US$2,508) or to export a container (US$3,064) is high (Table 4), making it difficult for exporters to reach their regional and international markets, especially with standard manufacturing goods for which competition is generally strong.

Table 5: The most problematic factors for doing business

Indicator	Botswana (percent)	Mauritius (percent)	Namibia (percent)	Tunisia (percent)	Venezuela (percent)	Trinidad and Tobago (percent)	Uruguay (percent)	Thailand (percent)
TOTAL	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Poor work ethic in national labor force	19.0	7.2	13.6	9.1	1.6	14.7	3.3	2.2
Inadequately educated workforce	14.0	15.2	19.4	5.3	1.2	5.1	5.7	7.4
Inefficient government bureaucracy	11.1	18.6	12.7	14.6	13.8	11.0	18.0	12.1
Inadequate supply of infrastructure	10.5	15.2	4.2	7.5	1.1	5.7	7.5	5.2
Access to financing	10.1	4.5	6.4	15.8	1.6	2.3	11.9	4.1
Inflation	7.4	7.2	6.5	8.6	6.5	15.3	2.4	8.5
Restrictive labor regulations	7.2	10.7	15.1	13.9	12.6	1.6	22.6	1.2
Corruption	6.3	8.0	5.4	2.7	8.4	13.2	0.5	10.3
Crime and theft	5.2	3.7	4.9	0.0	4.6	21.9	1.5	0.8
Poor public health	3.6	0.2	2.2	0.8	0.6	3.4	0.0	0.6
Tax regulations	2.3	1.6	2.0	7.7	2.6	0.7	7.6	5.1
Policy instability	1.3	4.1	0.2	0.6	19.3	1.7	5.5	13.0
Foreign currency regulations	1.2	1.8	1.1	5.8	20.1	0.3	0.0	4.6
Tax rates	1.0	1.8	6.4	6.9	1.1	1.8	13.4	3.5
Government instability/coups	0.0	0.2	0.0	0.6	5.1	1.3	0.0	21.5

Source: World Economic Forum, 2008.

Mauritius is the second-most competitive economy in sub-Saharan Africa in the GCI and the first in Africa in the World Bank's Doing Business (ranked 24th) in 2009 (Table 4). The procedures to start or to close a business are not burdensome. However, labor-market institutions need to be made more flexible. Entrepreneurs face stringent hiring and firing laws that increase their production costs. Importing a container in Mauritius costs US$725. The distance to international markets that, in the 1960s, was considered to be a major constraint for the development process does not appear as important as it was initially thought for competitiveness. For imports, it is observed that Mauritian standards are close to those prevailing in Thailand. The cost and the time to register property is high, however—in Mauritius this is about 210 days, against 162 days in Trinidad and Tobago, another small island of less than 2 million inhabitants; this same process takes only 2 days in Thailand (Table 4).

Mauritius is ranked 57th overall on the 2008–2009 GCI. It has strong institutions with reasonable levels of judicial independence. However, the 2008 World Economic Forum Executive Opinion Survey (Survey) suggests that, among 15 problematic factors for doing business, the most severe constraint is the country's inefficient government bureaucracy for 18.6 percent of respondents, followed by its inadequate supply of infrastructure (15.2 percent), inadequately educated workforce (15.2 percent), and restrictive labor regulations (10.7 percent). Addressing those inefficiencies would surely benefit the Mauritian economy. But, beyond red tape and extensive regulations, its bureaucracy is deemed benevolent. In other words, firms trust government and bureaucrats, but there are "too many rules." This is a significant difference from Trinidad and Tobago, where state failure is a serious constraint.

Firm performance in Mauritius, as measured by average labor productivity or TFP, is higher than in China although lower than the standards in the most productive Chinese provinces of Shenzhen or Hangzhou. Mauritius outperforms low-income sub-Saharan countries in productivity, but it lags behind Brazil and South Africa, partly because of its lower capital intensity. The country's unit labor cost is quite high and can be seen as a potential hindrance to the diversification process. On a yearly basis, the total cost of wages and other benefits in Mauritius is about US$3,800 against US$2,000 in the most efficient Chinese province of Hangzhou. The combination of productivity and wage measures gives Mauritius a unit labor cost that is twice the current ratios of large Asian countries such as China and India.

Mauritian firms perceive access to finance as a major constraint to their operations, and they suffer from bureaucratic red tape for getting business licensing or operating permits as well as facing many required procedures to start a new business. Firms also complain about the weak quality of human capital and consider that the educational system does not meet their needs. In addition to the unavailability of skilled workers, which has a clear negative impact on total productivity, firms have to provide on-the-job training. McDonald and Yao suggested that the recent increase in the unemployment rate could be explained by the rigidities in the labor market, namely wage regulation.[12] There is, therefore, need for reforms to improve business environment.

In the World Bank *Doing Business 2007,* Namibia is ranked 51st; it is 80th overall in the GCI 2008–2009. Starting and closing a business in the country is problematic. These difficulties tend to be correlated with a stable market structure that does not necessarily support economic performance in diversifying sectors. A low turnover of firms is generally correlated with a poor

creative destruction process that encourages incumbent firms, low competitive pressure, and a weak innovation environment. Registering property takes a long time and is financially costly. The Namibian environment provides a relatively good fiscal incentive since the percentage of the profit going to the state is 25.3 percent—compared with 58.5 percent in Uruguay, but only 17.1 percent in Botswana (Table 4).

Trading across borders in Namibia is expensive, as evidenced by the cost per container for both import and export (Table 4). Although Namibia should benefit from its coastal location, its distance to the rich markets of northern Europe and America tends to counterbalance this advantage. Labor regulations do not appear to be a major concern. The problem that Namibian producers face is in the inability to fire workers, who benefit from extensive legal protection against dismissal. One of the crucial problems in Namibia seems to be the behavior of workers. According to the GCR, 3 out of the 15 most problematic factors for doing business relate to the labor input and represent about 48 percent of the total recriminations by Namibian respondents (Table 5). Identified problems with this factor are an inadequately educated workforce (19.4 percent), restrictive labor regulations (15.1 percent), and a poor work ethic in the national labor force (13.6 percent). These three items prove to be much more serious than the weaknesses resulting from the functioning of the state: inefficient government bureaucracy (12.7 percent), inflation (6.5 percent), and tax rates (6.4 percent).

In 2007, the World Bank's Namibia Investment Climate Assessment (ICA) was conducted in Windhoek and Walvis Bay. According to the ICA study, firm productivity can be considered to be good. The median firm performance as measured by the value-added per worker is about US$15,000, 50 percent under the South African median firm, but nearly 50 percent above the level in Botswana and Mauritius. Labor productivity is also higher than in China and Thailand, some of the fastest-growing lower-middle-income countries. The median monthly Namibian wage for full-time permanent production workers is close to US$300. This is considerably higher than in most sub-Saharan countries, but much less than in South Africa, where it is US$800.

Labor cost accounts for about 30 percent of value-added in Namibia, a little more than in China or Thailand, so it does not appear to be a major constraint for the country's international competitiveness. Perceptions about the investment climate are somewhat atypical in the sense that there is no prevailing problem among the 17 considered areas. The ICA reports that for about 20 percent of firms, worker skills are a serious matter, but this ranks after crime (28 percent) and tax rates (20 percent). Taxation rates on profit are mentioned as a major concern by only 4.1 percent of the business executives. Namibia compares favorably with a wide range of middle-income economies and is one of the best performers in Africa in terms of productivity. Firm technical efficiency results from their organizational knowhow, as well as from a good economic and institutional environment. Few firms in Namibia complain about infrastructure. Managers in the manufacturing sector are mainly concerned about security, worker skills, and education. Consistent with this, both educational attainment and the quality of education are generally considered to be low.

Tunisia ranks among the most efficient middle-income countries on its business environment, comparing favorably with other Middle East and North African countries, and ranks 36th overall on the GCI, close to Thailand (34th). Thailand is a resource-scarce and labor-abundant economy with a per capita GDP close to that of Tunisia (US$3,200 in 2008) and an economy whose GDP growth is driven by manufacturing activities. However, the World Bank's *Doing Business 2009* ranks Tunisia 73rd against 13th for Thailand. The latter is in a highly competitive regional environment that requires pragmatic policies to promote efficiency and attract foreign direct investment. The Tunisian environment is less conducive in spite of its proximity to the European Union, and the fact that it has opened its market to European products duty-free since 2008.

In Tunisia, relations between employees and workers are strongly regulated. For instance, the firing index, which assigns values from 0 to 100 with higher values representing more rigid regulations, is 0 for Thailand and Uruguay, but 80 for Tunisia 80 (Table 4), close to what is observed in Venezuela (100), and significantly above the average for middle-income countries. Although closing a business is not a long and costly process, contract enforcement still remains problematic.

The total tax rate in Tunisia is high, absorbing 59 percent of profits compared with 38 percent in Thailand (Table 4). This high level of taxation is a consequence of high social security contributions that Tunisians have to pay rather than the corporate income tax rate, which is one of the lowest among the eight countries considered in this chapter. In November 2006, The Institut d'Economie Quantitative (IEQ) published a report on Tunisian competitiveness on the basis of a survey conducted with a sample of manufacturing enterprises. Most firms considered excessive tax and regulations to be major constraints for doing business in Tunisia, and they believed that this raises labor costs. Indirect costs, through the labor tax and social security contributions, are burdensome and viewed as a disincentive to invest in labor-intensive technologies.

Accessing credit is also considered to be an important concern for small- and medium-sized enterprises in Tunisia. The legal rights index score, which measures the degree to which collateral and bankruptcy laws facilitate lending, is quite low: 3, the lowest value in Table 4. According to the IEQ study, access and the cost of getting loans are a severe constraint for Tunisian firms.

Getting a loan needs to be covered by significant guarantees that vary from 138 percent of the total amount of the loan for large firms to 203 percent for small ones. Providing loans to the productive sector is one of the crucial objectives over the medium run. These constraints are also specified in Table 5. Indeed, access to financing (15.8 percent) ranks first among the most problematic factors for doing business, followed by government bureaucracy (14.6 percent) and problems around labor regulations (23 percent), while tax rates (7.7 percent) is the sixth most problematic factor. In comparison to Thailand, Tunisian authorities find their comparative advantage in the promotion of a more stable economic and political environment (1.2 percent against 34.5 percent) and less corruption (2.7 percent against 10.3 percent). But both countries still suffer from heavy bureaucracy.

Diversification of the economies and efficiency enhancers

Diversification of economies implies that countries produce, and presumably export, a wider range of products than they did initially. Over and above this, countries need to produce for export a wider range of goods and services, with emphasis on high-tech, higher-value-added, modern items. The usual argument for diversification for resource-rich economies is to mitigate the effects of Dutch disease. Since many resource prices have been highly volatile, overreliance on resource exports can be risky. This calls for countries to take mitigating measures by creating resource funds in good times or by promoting diversification. In the case of small economies such as our four countries, production is often narrowly based, with few significant exportables; this is also a source of economic vulnerability and therefore increases the need for diversification. In addition, the argument for diversification arises from the fact that natural resource production and exports benefit little from innovation and productivity gains, and countries need to expand into sectors that do benefit from such gains. And, although countries are encouraged to diversify, they need to ensure that the new goods or services are of high-enough quality to be internationally competitive.

The transformation of the four economies started with marginal changes favoring a reduction of the anti-export bias through incentives, rather than radical trade liberalization policies that would have been difficult to implement. However, broadening the productive base through the diversification process still remains a major challenge for all four of these economies.

The analysis of efficiency enhancers shows that market size shapes the development pattern. But with the removal of trade preferences, the current international environment is more difficult than the one that prevailed for decades. Regional integration is one of the solutions. The four countries have each signed several bilateral and regional agreements. For example, Botswana, Namibia, and Mauritius are member states of the South African Development Community (SADC), which was created in 1992. In August 2008, the last Summit of Heads of State and Government of SADC launched the free trade area, which recognized that regional free trade will create a larger market, releasing potential for trade, economic development, and employment creation. The SADC Protocol, which became effective in 2000, called for the establishment of the free trade area by 2012. Tunisia is likely to benefit from the gradual creation of a free-trade zone through the Euro-Mediterranean partnership of the Barcelona Declaration. Countries need to address issues related to the diversification process as globalization makes competition and firm survival more urgent than ever.

Stiffer competition forces economies to implement policies to improve productivity levels. In the four countries, price or cost competitiveness has been important for export promotion, but not strong enough to speed up diversification. African economies need to put a diversification process in place through pragmatic policies such as those of successful Asian economies. In Tunisia, businesses are taking advantage of the nearby European consumers and are also improving on the quality of their products. This strategy seems to be efficient, as evidenced by the 15.9 percent increase in exports in 2007 compared with a decline of about 3 percent in 2006.[13] In Mauritius, after several years of contraction, exports of apparel and clothing accessories are increasing. Both economies apparently have the potential to face Asian competition. However, this will require further restructuring and diversification through building additional niche markets in the manufacturing sector as well as providing strong support for the emergence of tradable services.

In Botswana, concerns about diversification of the economy are being addressed in the country's Ninth Development Plan, which was designed in response to the risk related to the depletion of diamond production and the need to increase formal employment. Structural reforms are being implemented to support private sector–led investment in nontraditional and non-mining sectors. In 1999, the International Financial Services Centre was created to mobilize Botswana's domestic expertise in financial services. In Namibia, authorities are promoting diversification through agro-industry, aquaculture, and some niche industries such as cement and small-scale processing of diamonds. Structural reforms might help to attract foreign investors as the private sector is expected to take the lead in diversifying exports.

Among services, tourism is an important sector from which Botswana could benefit because of its proximity to South Africa. Tourism, accounting for more than 10 percent of Botswana's GDP, is the third-largest sector in the economy and one of the most important that could support diversification of the economy.

Table 6: Global Competitiveness Index 2008–2009 scores for four African and four non-African countries

Global Competitiveness Index component	Botswana Rank (score)	Mauritius Rank (score)	Namibia Rank (score)	Tunisia Rank (score)	Thailand Rank (score)	Venezuela Rank (score)	Uruguay Rank (score)	Trinidad and Tobago Rank (score)
Global Competitiveness Index overall score	**56 (4.2)**	**57 (4.2)**	**80 (4.0)**	**36 (4.6)**	**34 (4.6)**	**105 (3.6)**	**75 (4.0)**	**92 (3.9)**
Basic requirements	**53 (4.6)**	**50 (4.7)**	**48 (4.7)**	**35 (5.2)**	**43 (5.0)**	**111 (3.6)**	**57 (4.5)**	**65 (4.4)**
1. Institutions	36 (4.7)	39 (4.7)	42 (4.6)	22 (5.2)	57 (4.2)	134 (2.4)	45 (4.6)	104 (3.4)
2. Infrastructure	52 (4.0)	43 (4.3)	33 (4.6)	34 (4.6)	29 (4.7)	109 (2.5)	69 (3.5)	63 (3.6)
3. Macroeconomic stability	22 (5.7)	117 (4.0)	27 (5.7)	75 (4.9)	41 (5.4)	110 (4.3)	104 (4.4)	51 (5.2)
4. Health and primary education	112 (4.2)	57 (5.7)	118 (4.0)	27 (6.1)	58 (5.6)	74 (5.4)	54 (5.7)	72 (5.4)
Efficiency enhancers	**82 (3.8)**	**66 (4.0)**	**93 (3.6)**	**53 (4.2)**	**36 (4.5)**	**94 (3.6)**	**83 (3.8)**	**80 (3.8)**
5. Higher education and training	87 (3.7)	67 (4.0)	110 (3.1)	27 (4.8)	51 (4.3)	79 (3.8)	62 (4.1)	78 (3.8)
6. Goods market efficiency	93 (3.9)	40 (4.6)	94 (3.9)	30 (4.8)	46 (4.5)	132 (3.1)	79 (4.1)	90 (4.0)
7. Labor market efficiency	52 (4.5)	65 (4.4)	50 (4.5)	103 (4.1)	13 (5.0)	131 (3.4)	106 (4.0)	76 (4.3)
8. Financial market sophistication	40 (4.8)	32 (5.0)	53 (4.5)	77 (4.1)	49 (4.6)	116 (3.5)	88 (4.0)	52 (4.6)
9. Technological readiness	89 (3.0)	55 (3.6)	85 (3.0)	52 (3.7)	66 (3.4)	86 (3.0)	64 (3.4)	63 (3.4)
10. Market size	101 (2.7)	110 (2.5)	122 (2.3)	62 (3.6)	21 (4.9)	36 (4.5)	91 (3.0)	103 (2.7)
Innovation and sophistication factors	**98 (3.2)**	**69 (3.6)**	**104 (3.2)**	**30 (4.2)**	**46 (3.9)**	**116 (3.0)**	**82 (3.4)**	**79 (3.5)**
11. Business sophistication	106 (3.5)	55 (4.3)	94 (3.6)	40 (4.5)	46 (4.4)	115 (3.3)	85 (3.8)	73 (4.0)
12. Innovation	83 (3.0)	80 (3.0)	111 (2.7)	27 (3.9)	54 (3.4)	115 (2.6)	77 (3.0)	86 (3.0)

Source: World Economic Forum, 2008.
Note: For each of the 12 pillars, the first figure refers to the international ranking out of 134 countries. The specific score, on a 1-to-7 scale with 1 being the worst and 7 the best, is shown in parentheses.

Similarly, in Namibia, tourism accounts for about 17 percent of GDP and employment, while in Mauritius and Tunisia, activities in tourism are already highly significant. In Mauritius, tourist arrivals increased by 15 percent in 2007, with the greatest rise occurring in the number of arrivals coming from China. In Tunisia, although new information and communication technology (NICT) is now a key strategic sector within services, tourism is the leading sector, accounting for 6 percent of the country's GDP in 2006.[14]

The four economies need to improve on the four key pillars of efficiency enhancers, on which they are ranked relatively low (Table 6). Further reforms still need to be implemented in crucial areas that influence firm productivity, including labor regulations and access to finance. In the manufacturing sector, labor input generally contributes to a high share of value-added. It means that more flexibility in contractual arrangements would reduce production costs. Among the efficiency enhancers of the GCR, out of 134 countries, Botswana ranks 52nd on labor market efficiency. However, some public regulations in Botswana still remain problematic for doing business;[15] this is also the case in Namibia. The impact of full implementation of Namibia's new Labor Act is yet to be fully determined, and labor market rigidities partly contribute to the high unemployment rate in Namibia.

About half of the Namibian population falls below the poverty line. Undernutrition and malnutrition are still problems, especially for young children. In Namibia and Botswana, HIV/AIDS prevalence—which has an enormous impact on life expectancy—is among the highest in the world; in Botswana, it was about 51 years in 2007, which is 20 years less than the average in upper-middle-income countries worldwide. In Tunisia, the rise in the working population and the rate of women's labor force participation create an unemployment problem. In Mauritius, in spite of continuous progress since the 1990s, labor regulations remain a problem outside the EPZ. A more efficient labor market would help workers in the transition from declining sectors to growing ones. Hiring and firing rules for the entire economy need to be adjusted to the more flexible standards that prevail in the EPZ. Furthermore, labor costs and firm competitiveness would improve with the dismantling of the current centralized wage settlement mechanism that undermines the relationship between nominal cost and factor productivity. In spite of these problems, Mauritius's ranking on the labor market efficiency pillar improved dramatically, moving from 82nd in 2007 to 65th in 2008.

In the four countries, reforms in the educational system are also required to provide growing sectors with skilled workers to meet market demand. Higher education and training is one of the six pillars of the efficiency enhancers component of the GCI. Education and training are key factors for technological readiness and increased productivity as well as competitiveness; this is the second main problematic factor for doing business in the three of the four economies, after market size. In Botswana and Namibia there is an acute shortage of skilled workers.

Education has been one of the main determinants of TFP gains over the period 1960–90 in Tunisia and Mauritius.[16] In Tunisia, quality education has supported new specializations through manufacturing niches and outsourcing activities. Education and training is also an important driver for competitiveness in Mauritius. However, weaknesses in the educational system of Mauritius is regarded as the third most problematic factor for doing business, forcing firms to provide on-the-job training.

Lessons and challenges in the current global context

The four African countries have addressed their different challenges in ways appropriate to their own circumstances. Some of their solutions share common traits. Together they provide some useful insights for other countries facing the same kinds of issues.

Lessons learned

Good governance and strong and visionary leadership through formal institutions and informal rules greatly contributed to the success of all four countries. Social consensus was promoted and strengthened over time. For example, political contestability and effective institutions governing private property have always existed in Botswana. According to Acemoglu et al., these institutions protected the property rights of actual and potential investors and provided political stability.[17] These institutions also ensure that political elites are constrained by the political system and the participation of a broad cross-section of the society. This active participation of the population dates back to the Kgotla, a precolonial and still operative institution where adult males assemble and freely discuss issues of public interest. This contributed to the constitution of efficient social capital giving rise to valuable social cohesion. Traditional institutions have coexisted with modern or more formal institutions in an efficient way. Through Kgotlas, people have the opportunity to criticize, to express their "voice" or "loyalty." Thus electoral competition but also traditional checks and balances support performance.

To a large extent, the other three countries also succeeded in building efficient institutions. Mauritius and Namibia share strong and transparent public institutions as well as independence of the judiciary. Although not at the same level or in the same form as in the three other countries, Tunisia's institutions are rated highly in the GCI, resting on fairly transparent and trustworthy relations between the government and civil society and providing some of its major competitiveness advantages.

Public governance has also played an important role. The four countries benefited from an efficient state combining responsible governments and good governance compared with most other African countries. This is particularly true in the areas of security, political and economic stability, and corruption. Important public goods (competent and honest bureaucracy, public safety, law and order, and health and sanitary standards) are aptly provided in the four countries. Infrastructure is fairly good, although more has to be done at this level to enhance competitiveness. Botswana ranks highly worldwide in the efficiency of government spending. It has succeeded in managing its development while many other African countries got trapped by the "resources curse." In Namibia, long-run dynamic growth was supported by a prudent and efficient fiscal policy that helped maintain a budget surplus and minimize external borrowing. Tunisia also managed its public spending efficiently. In all four countries, corruption is not considered a serious problem, and they enjoy a responsible civil service.

Importantly, the four countries succeeded in promoting a long-run holistic vision of development. This orientation of economic policy was supported by strong and visionary political leaders. States recently designed industrial policies in a broad sense, which included all policies stimulating specific economic activities (not industry per se) and promoting structural change.[18] Market failures that justify industrial policy can be found in virtually all kinds of nontraditional activities, not just in manufacturing. In Tunisia and Mauritius, industrial policies have made possible the coexistence of inward-looking protected activities with the development of an efficient export sector. Mauritius succeeded in overcoming the problem of its small market through the EPZ Act of 1970, which created a special regime for firms catering exclusively to the export market. The sugar cane monoculture economy of that country gradually diversified and transformed its productive sector beyond trade-protected activities. In Tunisia, early in the 1970s, the government followed a similar policy of providing fiscal incentives to exporters of textiles and garments. This contributed to strengthening light industry beyond traditional food-processing activities, and was further enhanced through the first Structural Adjustment Process (1986) and the implications of the Barcelona Declaration (1995). In both Tunisia and Botswana, development plans have been the traditional public instrument to promote their long-run visions.

These countries have all paid strong attention to the political feasibility of reforms. Political leaders were concerned with both the preservation of the social consensus and the promotion of economic reforms. Accordingly, the transformation of economies started with a preference given to marginal changes. The speed of the liberalization adopted in these countries was that of gradualism instead of shock therapy. This strategy was made possible by the quality of institutions, especially the ability and credibility of governments to commit over the long run. The reduction of the anti-export bias through incentives was favored over radical trade liberalization policies, which would have been difficult to implement not only because of the permanent search

for social peace, but also because of the difficulty in going against vested interests.[19] Protected firms may use their influence to block any policy reforms that may eliminate their domestic advantages. Small groups benefiting from trade protectionism hurt economic growth; but since the benefits of these policies are concentrated among the few coalition members and the costs are diffused throughout the whole population, public resistance to the cost of protection is unlikely.[20]

Although manufacturing activities still remain limited in Namibia and Botswana, the diversification process had initial political problems similar to those in Mauritius and Tunisia. Harvey and Lewis argue that, at independence, Botswana's government was inexperienced in running a modern state.[21] By the mid 1970s, when diamond revenues exceeded those from ranching, it was important that political elites did not fear becoming political losers of economic transformations. According to Acemoglu et al., political elites in Botswana and communities inherited a set of institutional prerequisites that placed restrictions on infighting among themselves over political rents.[22] In Tunisia, except for the two post-independence decades, the leadership preferred public-private partnerships to the public sector alone in the management of economic affairs.

To some extent the four countries adopted pragmatic industrial policies copying the experience of Japan's Ministry of International Trade and Industry (MITI), where developmental nationalism was embodied in formal institutions or state bureaucracies.[23] For example, Botswana negotiated in 1967 a lasting and win-win partnership with the South African diamond company De Beers. This partnership enabled the government to obtain revenues from mineral wealth that it successfully channeled into productive investments. A second example of the ability to create a fruitful dialogue with private organizations is Tunisia's *mise-à-niveau* program, which was developed in the wake of the association agreement with the European Union in 1995. This program, which was launched in 1996, played a positive role in the performance of the Tunisian industry. It entails allocating to companies that present an upgrading investment plan a financial subsidy to both strengthen their competitiveness and preserve market shares through modernizing their facilities and increasing their use of human capital and intangible production means. Firms that took part in this program have improved their productivity and export performance compared to others.

The challenges

Beyond past performance, these four countries face the challenge of the current global economic crisis in the short and medium terms in managing their economies and competitiveness. In the long run, they have to address the issues of accelerating the diversification of the productive base to enhance their competitiveness.

Short-term challenges: The financial crisis

The financial crisis is now having an impact on the real sector of the four African economies considered in this chapter.[24] Their growth outlooks have deteriorated and their macroeconomic balances worsened (Table 1). For example, the African Development Bank pre-crisis growth estimates for Botswana in 2008 and 2009 were 5.3 and 5.2 percent, respectively. They have been revised down to 3.9 and 2.6 percent, respectively. Similar growth deceleration trends are being experienced in the three other countries.

The global downturn is severely affecting Botswana's mining industries, as well as manufacturing and services that rely on external demand. The fall in diamond production and prices since November 2008 have been important contributing factors to this deterioration. Botswana has experienced a sharp decline in industrial production, export, and government revenues, leading to fiscal outruns and external imbalances. Foreign reserves are falling rapidly. The near outlook is quite pessimistic because the fall in mineral revenues is expected to be prolonged, limiting the government's ability to finance economic recovery plans.

In Namibia, the first-round impact of the crisis occurred through indirect channels: exchange rate, inflation, and interest rates. The Namibia dollar depreciated against major currencies during the first three quarters of 2008. This led to high prices of imported goods and inflation, and, consequently, high interest rates. The GDP growth estimates for 2008 and 2009 have been revised downward from 4.4 and 3.3 percent to 3.4 and 2.7 percent, respectively. Estimated and projected exports revenues have also been revised downward, while the current account surplus will be maintained but at much lower level than pre-crisis.

Although Tunisia was initially sheltered from the financial crisis because of a relatively closed financial sector and restrictions on the capital account, it has by now experienced the full spectrum of the effects of the global economic downturn, from a contraction in industrial production and exports to sharp declines in government revenues and foreign reserves. Tunisia, with 80 percent of its exports to the euro zone, is highly vulnerable to the economic slowdown in that area. As a result, 2009 growth projections have been revised downward by 1.5 percentage points.

In Mauritius, the financial system was protected from the first-round effects of the global financial crisis. The banking system is well regulated, and banks are adequately capitalized and highly liquid. In addition, local banks have been quite conservative in their investment strategy, with their loans being financed mainly through domestic deposits. The second-round effects of the global economic meltdown are now being felt by the real sector. The export sector is being affected by the recession in Mauritius' major export markets, and the

Mauritian tourism sector is also affected by a decline in arrivals from Europe, its main market.

The four countries have attempted to mitigate the adverse impact of the crisis. For instance, Botswana's Central Bank cut its bank rate by 50 basis points, to 15 percent in December 2008. Namibia's Central Bank also reduced its repurchase rate to stimulate borrowing and boost private investment and consumption. The Tunisian government has taken a number of steps to attenuate the impact of the financial crisis: a commission to monitor the crisis has been established; the 2009 budget includes a significant increase in public investments, along with measures to increase external competitiveness and employment and strengthen social protection; and the Central Bank is relaxing its monetary policy stance—the dinar money market rate has fallen from about 5.2 percent in December 2008 to 4.65 percent in January 2009. In Mauritius, in January 2009 the government announced in a stimulus package to boost domestic demand and increase job creation. This package is worth 10.4 billion Mauritian rupees (US$0.3 billion), or approximately 3 percent of the country's GDP.

The crisis has underscored the relative vulnerability of these four small open economies, which are highly reliant on a few key products that either face acute competition on world markets (e.g., textiles) or whose prices are highly correlated with the global economic situation (diamonds). There is a critical role for export diversification in reinforcing the resilience of economies to external shocks. To achieve this goal, the stiffer international competition calls for these countries to improve their business environment and possibly establish more active exchange rate policies. As argued by Rodrik, a structural undervaluation of the exchange rate facilitates economic growth.[25] This strategy has proved efficient in some Asian economies, including China.

Medium-term challenges: Diversification

In Mauritius and Tunisia, the textile industry is facing some challenges. Some years after phasing out the MFA, textile has performed better than was expected in these two countries. In Tunisia, producers try to position their production both on the basis of short distribution channels by catering to nearby European consumers and on quality productions. This strategy seems to be working well for the sector's efficiency, as evidenced by an increase in exports of 15.9 percent in 2007 compared to a decline of about 3 percent in 2006.[26] In Mauritius, increasing South-South trade partnerships could mitigate the direct impact of big emerging economies.

As former President Festus Mogae of Botswana has recently recalled, the diversification of Botswana's economy remains its biggest challenge.[27] Concerns about the diversification of the economy are addressed in the Ninth Development Plan in response to the risk of a depleted diamond stock and the need to increase formal employment. Structural reforms are being implemented to support private sector–led investment in nontraditional and non-mining sectors.

In Namibia, the focus is on diversification through agro-industry and aquaculture, and includes some niche industries such as cement and small-scale diamond processing. The private sector is expected to take the lead in diversifying exports, so structural reforms that could attract foreign investors are being considered.

Based on the development pattern of Mauritius and Tunisia, tourism is one sector that has the potential to contribute to the diversification of Botswana's and Namibia's economies. Tourism is Tunisia's leading sector, accounting for 6 percent of GDP in 2006;[28] both Botswana and Namibia can benefit from their proximity to South Africa in growing their tourism sectors—in Botswana, it now accounts for more than 10 percent of GDP and is its third-largest sector. In Namibia, tourism accounts for about 17 percent of GDP and employment.

Reforms can be facilitated by good relative prices, and the exchange rate policy contributes to this end. But the four economies can also improve the costs of doing business both internally and with the outside world. However, additional improvements are needed in all four. Business executives complain about some restrictive regulations, especially at the level of the labor market, which negatively impact productivity levels.

In the manufacturing sector, labor input generally contributes a high share of value-added, and there is need for more flexibility in contractual arrangements. In Namibia, where the impact of full implementation of the new Labor Act is uncertain, labor market rigidities could be contributing to the high unemployment rate. In Tunisia, where there are significant labor rigidities, the rise in the working population and the rate of women's labor force participation has an impact on the unemployment rate. In Mauritius, in spite of continuous progress since the 1990s, labor regulations remain a problem outside the EPZ. Therefore, labor market liberalization in all four countries would help the deepening of their integration into the world economy—provided that governments find the right way to maintain the social stability that contributes to long-run economic successes.

In the four countries, reforms in the educational system are also required to provide growing sectors with skilled workers. For all four, education and training are a major problem. In Botswana and Namibia, there is an acute shortage of skilled workers that needs to be addressed. There is a strong relation between investment in people and economic growth. Education and training are therefore a key factor for technological readiness to raise productivity and to enlarge production of more sophisticated products. These factors are therefore crucial to move these economies on to an efficiency-driven economies and, eventually, to an innovation-driven growth path.

Many observers consider that education has been one of the main determinants of TFP gains over the period 1960–90 in Tunisia and Mauritius.[29] In Tunisia, a new sectoral production structure will depend on the possibility of a more efficient mobilization of human capital and knowledge, more efficient production processes, and a higher quality of products. Education and training are also important drivers for Mauritius, as the weakness of the educational system is among the most problematic factors for doing business (Table 5). To counterbalance this shortcoming, firms have to provide training, which constitutes an additional cost to them.

Channeling adequate and long-term financial resources to producers, which is a driving force for diversifying the economy and for the restructuring of the manufacturing sector, still remains a challenge for these economies.

The scope of the convertibility of domestic currencies is also a medium-term objective. Mauritius has moved more rapidly than Tunisia to a high level of convertibility of the domestic currency with free capital mobility. Although the liberalization of the capital account is a factor for deepening the integration into the world economy, unfettered capital account liberalization may increase risks leading to currency and banking crises. With lessons learned from the crises in Asia and Latin America over the last decade, and with the financial problems that some emerging countries are presently facing with the worldwide crisis, it is clear that African countries must move very carefully with capital account liberalization.

Conclusions

Botswana, Mauritius, Namibia, and Tunisia are among the few countries that qualify as African economic success stories. In all four countries, the governments have proved to be a driving force behind their success. The four states established fairly clear rules of the game, and maintained peace and security as well as provided adequate public services.

Resource-rich Botswana and Namibia avoided the Dutch disease and the violence and domestic conflicts that very often come with natural resource endowments. In both countries, thanks to efficient governance, natural resources have been a blessing, not a curse. In Mauritius and Tunisia, which are resource-scarce and labor-abundant countries, an active and flexible real exchange rate policy has helped their development. Along with sectoral adjustments this has allowed them to reach macroeconomic equilibrium.

Beyond a sound macroeconomic framework, institutions have been a determining factor for social cohesion in all four countries. Good governance as well as strong and visionary leadership through formal institutions and informal rules, as in the case of Botswana, has greatly contributed to the success of the four countries. Social consensus was promoted and strengthened over time. Governance is part of this institutional environment and has proved to be efficient. States have proved to be efficient in promoting a long-run holistic vision of development, taking into account the constraint of their small economies and the need to maintain social cohesion.

The governments of Mauritius and Tunisia were concerned about the political feasibility of reforms. They chose gradualism over shock therapy. This choice was made within a framework of credible public actions and the ability of these governments to commit to their long-run goals. As in some Asian countries, public-private partnerships were favored over large public sectors in the management of economic affairs. Some of these positive elements will be significant assets that these countries can use to manage the implications of the global economic crisis and to diversify their economies to enhance their competitiveness.

The four countries benefited from an efficient state combining responsible governments and good governance compared with most other African countries. This is particularly true in the areas of security, political and economic stability, and corruption. Important public goods (competent and honest bureaucracy, public safety, law and order, and health and sanitary standards) are aptly provided in the four countries. Infrastructure is fairly good, although more has to be done at this level to enhance competitiveness. Botswana ranks highly worldwide in the efficiency of government spending. It has succeeded in managing its development while many other African countries got trapped by the "resources curse." In Namibia, long-run dynamic growth was supported by prudent and efficient fiscal policy that helps maintain a budget surplus and minimize external borrowing. Tunisia also managed its public spending efficiently.

Botswana, Mauritius, Namibia, and Tunisia all need to increase the quality of their human resources to further their competitiveness. Given their current stages of development and the global economic environment, human capital will be a key condition for these countries to enhance firm productivity, upgrade technologies, and develop high-value-added services. In this respect, higher education and training need to address labor market needs. All four countries would benefit from having greater flexibility in the labor market. However, such flexibility needs to preserve the social contract that helps those countries avoid violence, crime, and endemic corruption.

Notes

1 Acemoglu et al. 2003.

2 Basdevant 2008.

3 The paradox of diamond exploration in Botswana is that it accounts for about 5 percent of employment.

4 AfDB 2007a.

5 Balassa 1964 and Samuelson 1964.

6 This initial forecast was made in Meade 1961. See Subramanian and Roy 2001.

7 AfDB 2007a.

8 Rogoff 2005.

9 Rodrik 2008.

10 IMF 2007.

11 IMF 2008.

12 McDonald and Yao 2003.

13 AfDB 2007a.

14 AfDB 2007a.

15 Basdevant 2008.

16 See Morrisson and Talbi 1996; Subramanian 2001.

17 Acemoglu et al. 2003.

18 Rodrik 2008.

19 See Hellman and Kaufmann 2001.

20 Olson 1965, 1982.

21 Harvey and Lewis 1990.

22 Acemoglu et al. 2003.

23 Kiiza 2006.

24 AfDB 2009.

25 Rodrik 2008.

26 AfDB 2007a.

27 Mogae 2008.

28 AfDB 2007a.

29 See Morrisson and Talbi 1996; Subramanian 2001.

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Appendix A: Price competitiveness through real effective exchange rates

For each country, two indexes have been considered to measure the standard real effective exchange rates (REERs). These two indexes differ according to the international partners and the external trade weighting pattern we refer to. In both cases, the 10 largest bilateral trade partners are considered over the period 1999–2003. One index refers to the non-oil countries from which a country imports its goods and services; the other is based on the countries to which a country exports its products. Weights are calculated as an average over the period 1999–2003 in order to focus the competitiveness diagnosis on the most recent years. This choice can take into account the increasing contribution of some large emerging countries such as China, India, and Brazil. Using the OECD's list, 21 countries are classified as oil-exporters—those for which petroleum-related products represent at least 50 percent of exports. The main rationale for this distinction is that competition between oil imports and domestic production is limited or does not exist. Moreover, an oil price increase that can be anticipated as permanent is a positive shock to the terms of trade for energy producers. Such an increase raises the level of permanent income of the oil-producing country's citizens and gives rise to potential inflationary pressures, generating the Dutch disease phenomenon. The potential negative impact of the domestic relative price movement is not negligible for the production structure of oil-exporters. But it is much more damaging for oil-importers. Indeed, when external terms of trade deteriorate, the same inflationary pressures mean a loss of competitiveness for all tradables.

Because of its better statistical properties, a geometric rather than an arithmetic mean of the relative prices has been used to compute the REER. An appreciation of the average nominal exchange rates reflects a potential loss of competitiveness. In equations (1) and (2), (*i*) refers to a partner and *wi* to its relative contribution to the total bilateral imports.

Nominal effective exchange rate (NEER)

$$NEER = \prod_{i=1}^{10} (NBER_i)^{wi} \qquad (1)$$

Real effective exchange rate (REER)

$$REER = NEER \times \prod_{i=1}^{10} \left(\frac{CPI}{CPI_i}\right)^{wi} \qquad (2)$$

where (according to the IMF's *International Financial Statistics*)

CPI = consumer price index of the African country or its partners (*i*);

$NBER_i$ = nominal bilateral exchange rate of the country as regards partner *i*;

and (according to *PCTAS-SITC-Rev.3*)

wi = the weight of the *i*th partner in the bilateral trade of the country (1999–2003).

The 10 largest partners are considered. $i = (1 \ldots 10)$.

Appendix B: Main exports and their respective share in total exports, 2006

Countries and products	Product 1 (percent)	Product 2 (percent)	Product 3 (percent)
Botswana	Diamonds, non-industrial (78.6)	Nickel mattes (11.4)	Diamonds, industrial non-worked (4.1)
Mauritius	T-shirts, jerseys, vests, etc. knits (17.7)	Sugar (beet or cane), raw (17.9)	Skipjack or stripe-bellied bonito, frozen (9.7)
Namibia	Diamonds, industrial non-worked (39.5)	Zinc, crude (15.3)	Natural uranium (9.8)
Tunisia	Petroleum oils and oils from bituminous) minerals, crude (8.7	Men/boy's trousers and shorts, cotton, not knitted (6.2)	Olive oil, virgin (5.4)

Source: *African Economic Outlook 2008,* AfDB, OECD, and UNECA, 2008. Available at http://www.oecd.org/document/33/0,3343,en_2649_15162846_39963489_1_1_1_1,00.html.
Note: Products are at the 4-digit level of the SITC3.

Appendix C: Macroeconomic performance and social development indicators, 2007

Indicator	Botswana	Mauritius	Namibia	Tunisia	Sub-Saharan Africa	Upper middle income	Low middle income
Population (millions)	1.9	1.3	2.1	10.3	800	823	1,296
GDP at constant 2000 prices (US$)	4,439	4,649	2,246	2,626	842	5,913	2,037
Infant mortality per 1,000 live births	46.5	14	42.3	19.8	94	22	85
Life expectancy at birth (years)	50.7	72.8	52.9	62.5	51	71	57
Literacy rate (percent of population age 15 +)	82.8	87.1	86.6	77.9	59	93	61
Gross primary enrollment (percent of school aged population)	108	102.1	106.3	110	94	111	94
Access to water, 2004 (percent of population)	95	100	87	93	58	95	68

Source: African Economic Outlook 2008, AfDB, OECD, and UNECA, 2008. Available at http://www.oecd.org/document/33/0,3343,en_2649_15162846_39963489_1_1_1_1,00.html.

Note: Enrollment rates may be higher than 100 percent because of repeaters, adults who are enrolled even though they are not in the age group being measured, and other discrepancies. For the last three columns, see the World Bank's Country-at-a-glance tables, available at http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20485916~menuPK:1297819~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html.

Part 2

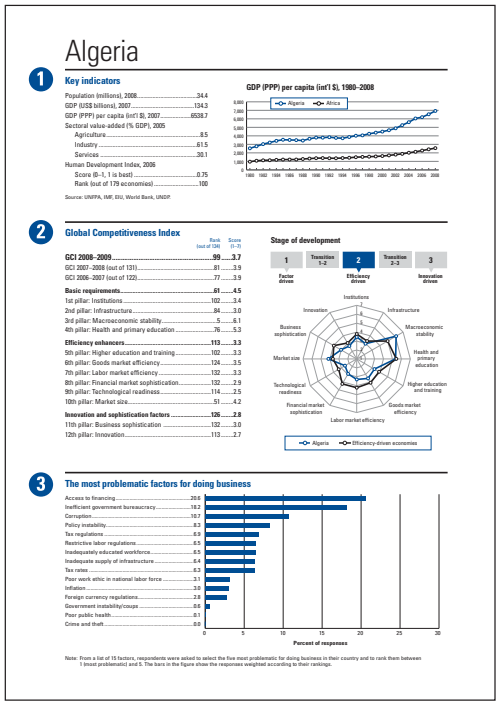
Country Profiles

2.1

Competitiveness Profiles

How to Read the Competitiveness Profiles

The Competitiveness Profiles section of the *Africa Competitiveness Report 2009* presents details of the performance in the Global Competitiveness Index (GCI) discussed in Chapter 1.1 for each of the 31 African countries covered by the Index.



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1 Key indicators

The first section presents a selection of key indicators. Population figures come from the United Nation Population Fund (UNFPA)'s *State of World Population 2008,* available at www.unfpa.org/swp. Gross domestic product (GDP) figures come from the October 2008 edition of the International Monetary Fund's (IMF) *World Economic Outlook,* available at www.imf.org/weo. The structure of GDP was obtained from the Economist Intelligence Unit (EIU)'s *CountryData Database* and the World Bank's *World Development Indicators Online Database* (both accessed April 1st, 2009). The Human Development Index (HDI) ranking is computed by the United Nations Development Programme (UNDP) and is presented in the *Human Development Indices: Statistical Update 2008.*

In the right-hand side of the section, a chart shows the evolution of GDP per capita valued at power purchasing parity (PPP) over the period 1980–2008. Note that for Namibia data are available only from 1990 on.

2 Global Competitiveness Index

This section details the country's performance on the GCI. In the table on the left-hand side, the first column shows its ranks among the 134 countries covered by the GCI and the second column presents the scores.

On the right-hand side, the figure shows the country's performance on the 12 pillars of the GCI (blue line) measured against the average scores across all the countries in the same stage of development (black line).

3 The most problematic factors for doing business

This figure summarizes those factors seen by business executives as the most problematic for doing business in their economy. The information is drawn from the World Economic Forum's Executive Opinion Survey 2007 and 2008. From a list of 15 factors, respondents were asked to select the five most problematic ones, and to rank those from 1 (most problematic) to 5. The results were then tabulated and weighted according to the ranking assigned by respondents.[1]

1 For more information regarding the Executive Opinion Survey, see World Economic Forum. 2008. *The Global Competitiveness Report 2008–2009.* Geneva: World Economic Forum.

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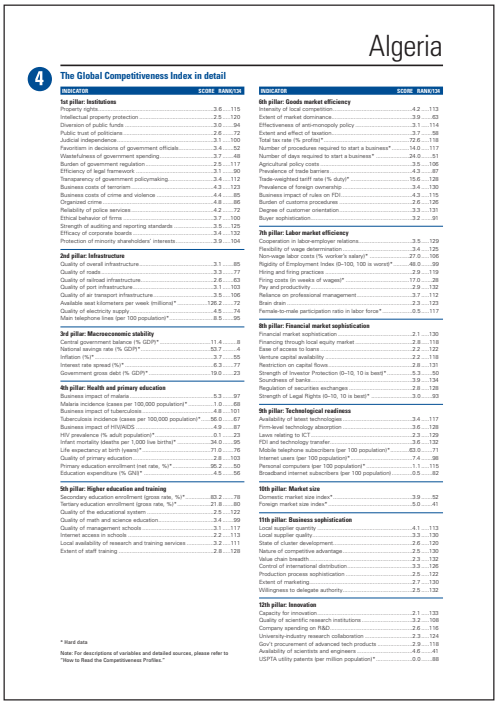
❹ This page presents the score and rank achieved by a country on each of the indicators entering the composition of the GCI. The following pages provide additional information and definitions on the indicators that enter the composition of the GCI.



Algeria

❹ The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	3.6	115
Intellectual property protection	2.5	120
Diversion of public funds	3.0	94
Public trust of politicians	2.6	72
Judicial independence	3.1	100
Favoritism in decisions of government officials	3.4	52
Wastefulness of government spending	3.7	48
Burden of government regulation	2.5	117
Efficiency of legal framework	3.1	90
Transparency of government policymaking	3.4	112
Business costs of terrorism	4.3	123
Business costs of crime and violence	4.4	85
Organized crime	4.8	86
Reliability of police services	4.2	72
Ethical behavior of firms	3.7	100
Strength of auditing and reporting standards	3.5	125
Efficacy of corporate boards	3.4	132
Protection of minority shareholders' interests	3.9	104
2nd pillar: Infrastructure		
Quality of overall infrastructure	3.1	85
Quality of roads	3.3	77
Quality of railroad infrastructure	2.6	63
Quality of port infrastructure	3.1	103
Quality of air transport infrastructure	3.5	106
Available seat kilometers per week (millions)*	126.2	72
Quality of electricity supply	4.5	74
Main telephone lines (per 100 population)*	8.5	95
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	11.4	8
National savings rate (% GDP)*	53.7	4
Inflation (%)*	3.7	55
Interest rate spread (%)*	6.3	77
Government gross debt (% GDP)*	19.0	23
4th pillar: Health and primary education		
Business impact of malaria	5.3	97
Malaria incidence (cases per 100,000 population)*	1.0	68
Business impact of tuberculosis	4.8	101
Tuberculosis incidence (cases per 100,000 population)*	56.0	87
Business impact of HIV/AIDS	4.9	87
HIV prevalence (% adult population)*	0.1	23
Infant mortality (deaths per 1,000 live births)*	34.0	95
Life expectancy at birth (years)*	71.0	76
Quality of primary education	2.8	103
Primary education enrollment (net rate, %)*	95.2	50
Education expenditure (% GNI)*	4.5	56
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	83.2	78
Tertiary education enrollment (gross rate, %)*	21.8	80
Quality of the educational system	2.5	122
Quality of math and science education	3.4	99
Quality of management schools	3.1	117
Internet access in schools	2.2	113
Local availability of research and training services	3.2	111
Extent of staff training	2.8	128
6th pillar: Goods market efficiency		
Intensity of local competition	4.2	113
Extent of market dominance	3.9	63
Effectiveness of anti-monopoly policy	3.1	114
Extent and effect of taxation	3.7	58
Total tax rate (% profits)*	72.6	118
Number of procedures required to start a business*	14.0	117
Number of days required to start a business*	24.0	51
Agricultural policy costs	3.5	106
Prevalence of trade barriers	4.3	87
Trade-weighted tariff rate (% duty)*	15.6	126
Prevalence of foreign ownership	3.4	130
Business impact of rules on FDI	4.3	115
Burden of customs procedures	2.6	126
Degree of customer orientation	3.3	131
Buyer sophistication	3.2	91
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	3.5	129
Flexibility of wage determination	3.4	125
Non-wage labor costs (% worker's salary)*	27.0	106
Rigidity of Employment Index (0–100, 100 is worst)*	48.0	99
Hiring and firing practices	2.9	119
Firing costs (in weeks of wages)*	17.0	28
Pay and productivity	2.9	132
Reliance on professional management	3.7	112
Brain drain	2.3	123
Female-to-male participation ratio in labor force*	0.5	117
8th pillar: Financial market sophistication		
Financial market sophistication	2.1	130
Financing through local equity market	2.8	118
Ease of access to loans	2.2	122
Venture capital availability	2.2	118
Restriction on capital flows	2.8	131
Strength of Investor Protection (0–10, 10 is best)*	5.3	50
Soundness of banks	3.9	134
Regulation of securities exchanges	2.8	128
Strength of Legal Rights (0–10, 10 is best)*	3.0	93
9th pillar: Technological readiness		
Availability of latest technologies	3.4	117
Firm-level technology absorption	3.6	128
Laws relating to ICT	2.3	129
FDI and technology transfer	3.6	132
Mobile telephone subscribers (per 100 population)*	63.0	71
Internet users (per 100 population)*	7.4	96
Personal computers (per 100 population)*	1.1	115
Broadband internet subscribers (per 100 population)	0.5	82
10th pillar: Market size		
Domestic market size index*	3.9	52
Foreign market size index*	5.0	41
11th pillar: Business sophistication		
Local supplier quantity	4.1	113
Local supplier quality	3.3	130
State of cluster development	2.6	120
Nature of competitive advantage	2.5	130
Value chain breadth	2.3	132
Control of international distribution	3.3	126
Production process sophistication	2.5	122
Extent of marketing	2.7	130
Willingness to delegate authority	2.5	132
12th pillar: Innovation		
Capacity for innovation	2.1	133
Quality of scientific research institutions	3.2	108
Company spending on R&D	2.6	116
University-industry research collaboration	2.3	124
Gov't procurement of advanced tech products	2.9	118
Availability of scientists and engineers	4.6	41
USPTA utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

TECHNICAL NOTES AND SOURCES

This section provides detailed information, including computation methods and sources, for all the indicators that enter the Global Competitiveness Index 2008–2009 (GCI).

Two types of data are used in the GCI: survey data and hard data.

- **Survey data**: average responses in each country to questions included in the World Economic Forum's Executive Opinion Survey, conducted in the early months of 2007 and 2008.

- **Hard data**: indicators obtained from a variety of sources. While survey data provide qualitative information, hard data are an objective measure of a quantity (for example, gross domestic product, malaria incidence, number of personal computers, number of procedures to start a business, and so on). We use the latest data available from international organizations (such as the IMF, the World Bank, and various United Nations agencies), completed, if necessary, by national sources.

For each indicator, the title appears on the first line, preceded by its number to allow for quick reference. The numbering refers to the data tables section in *The Global Competitiveness Report 2008–2009*. Underneath is a description of the indicator or, in the case of Executive Opinion Survey data, the full question and the associated answers.

1st pillar: Institutions

1.01 Property rights

Property rights in your country, including over financial assets, are (1 = poorly defined and not protected by law, 7 = clearly defined and well protected by law)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.02 Intellectual property protection

Intellectual property protection and anti-counterfeiting measures in your country are (1 = weak and not enforced, 7 = strong and enforced)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.03 Diversion of public funds

In your country, diversion of public funds to companies, individuals, or groups due to corruption (1 = is common, 7 = never occurs)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.04 Public trust of politicians

Public trust in the financial honesty of politicians in your country is (1 = very low, 7 = very high)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.05 Judicial independence

Is the judiciary in your country independent from political influences of members of government, citizens, or firms? (1 = no—heavily influenced, 7 = yes—entirely independent)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.06 Favoritism in decisions of government officials

When deciding upon policies and contracts, government officials in your country (1 = usually favor well-connected firms and individuals, 7 = are neutral)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.07 Wastefulness of government spending

The composition of public spending in your country (1 = is wasteful, 7 = efficiently provides necessary goods and services not provided by the market)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.08 Burden of government regulation

Complying with administrative requirements (permits, regulations, reporting) issued by the government in your country is (1 = burdensome, 7 = not burdensome)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.09 Efficiency of legal framework

The legal framework in your country for private businesses to settle disputes and challenge the legality of government actions and/or regulations is (1 = inefficient and subject to manipulation, 7 = efficient and follows a clear, neutral process)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.10 Transparency of government policymaking

Are firms in your country usually informed clearly by the government of changes in policies and regulations affecting your industry? (1 = never informed; 7 = always informed)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.11 Business costs of terrorism

The threat of terrorism in your country (1 = imposes significant costs on businesses, 7 = does not impose significant costs on businesses)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.12 Business costs of crime and violence

The incidence of common crime and violence in your country (1 = imposes significant costs on businesses, 7 = does not impose significant costs on businesses)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.13 Organized crime

Organized crime (mafia-oriented racketeering, extortion) in your country (1 = imposes significant costs on businesses, 7 = does not impose significant costs on businesses)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.14 Reliability of police services

Police services in your country (1 = cannot be relied upon to enforce law and order, 7 = can be relied upon to enforce law and order)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.15 Ethical behavior of firms

The corporate ethics (ethical behavior in interactions with public officials, politicians, and other enterprises) of firms in your country are (1 = among the worst in the world, 7 = among the best in the world)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.16 Strength of auditing and reporting standards

Financial auditing and reporting standards regarding company financial performance in your country are (1 = extremely weak, 7 = extremely strong, the best in the world)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.17 Efficacy of corporate boards

Corporate governance by investors and boards of directors in your country is characterized by (1 = management has little accountability, 7 = investors and boards exert strong supervision of management decisions)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

1.18 Protection of minority shareholders' interests

Interests of minority shareholders in your country are (1 = not protected by law, 7 = protected by law and actively enforced)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

2nd pillar: Infrastructure

2.01 Quality of overall infrastructure

General infrastructure in your country is (1 = underdeveloped, 7 = extensive and efficient by international standards)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

2.02 Quality of roads

Roads in your country are (1 = underdeveloped, 7 = extensive and efficient by international standards)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

2.03 Quality of railroad infrastructure

Railroads in your country are (1 = underdeveloped, 7 = extensive and efficient by international standards)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

2.04 Quality of port infrastructure

Port facilities and inland waterways in your country are (1 = underdeveloped, 7 = extensive and efficient by international standards) | Note: For landlocked countries, this measures the ease of access to port facilities and inland waterways.

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

2.05 Quality of air transport infrastructure

Passenger air transport in your country is (1 = underdeveloped, 7 = extensive and efficient by international standards)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

2.06 Available seat kilometers (hard data)

Scheduled available seat kilometers per week originating in country (in millions) | January 2008 and June 2008 average

This variable measures an airline's passenger-carrying capacity; it is composed of the number of seats available on each flight multiplied by the flight distance in kilometers. The resulting variable is an average of the total for all scheduled flights in a week during January (winter schedule) and June (winter schedule) 2008.

Source: International Air Transport Association, SRS Analyser.

2.07 Quality of electricity supply

The quality of the electricity supply in your country (lack of interruptions and lack of voltage fluctuations) (1 = is worse than in most other countries, 7 = meets the highest standards in the world)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

2.08 Telephone lines (hard data)

Main telephone lines per 100 population | 2006

A main telephone line is a telephone line connecting the subscriber's terminal equipment to the public switched telephone network and that has a dedicated port in the telephone exchange equipment.

Source: International Telecommunication Union, *World Telecommunication Indicators 2008* (June 2008 update); national sources.

3rd pillar: Macroeconomic stability

3.01 Government surplus/deficit (hard data)

Central government gross surplus/deficit as a percentage of GDP | 2007

Source: IMF, *World Economic Outlook Database* (April 2008); IMF country reports; European Central Bank; European Bank for Reconstruction and Development; African Development Bank; Economist Intelligence Unit, *CountryData Database* (June 2008); national sources.

3.02 National savings rate (hard data)

National savings rate as a percentage of GDP | 2007

Source: IMF, *World Economic Outlook Database* (April 2008); Economist Intelligence Unit, *CountryData Database* (June 2008); The World Bank, *World Development Indicators 2008;* national sources.

3.03 Inflation (hard data)

Annual percent change in consumer price index | 2007 average

Source: IMF, *World Economic Outlook Database* (April 2008); national sources.

3.04 Interest rate spread (hard data)

Average interest rate spread (difference between typical lending and deposit rates) | 2007

This measures the difference between the typical short-term lending and deposit rates.

Source: IMF, *International Financial Statistics;* Economist Intelligence Unit, *CountryData Database* (June 2008); The World Bank, *World Development Indicators 2008;* national sources.

3.05 Government debt (hard data)

Government gross debt as a percentage of GDP | 2007

Source: IMF, *World Economic Outlook Database* (April 2008); IMF country reports; OECD, *OECD Economic Outlook* no. 83 (June 2008); European Central Bank; European Bank for Reconstruction and Development; Economist Intelligence Unit, *CountryData Database* (June 2008); national sources.

4th pillar: Health and primary education

4.01 Business impact of malaria

How serious do you consider the impact of malaria on your company in the next 5 years? (1 = extremely serious, 7 = not a problem)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

4.02 Malaria incidence (hard data)

Number of malaria cases per 100,000 population | 2003

Source: World Health Organization, *Global Health Atlas* database (July 2008); World Health Organization Regional Offices; The World Bank, *World Development Indicators 2008;* UNDP, *Human Development Report 2006;* national sources.

4.03 Business impact of tuberculosis

How serious do you consider the impact of tuberculosis on your company in the next 5 years? (1 = extremely serious, 7 = not a problem)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

4.04 Tuberculosis incidence (hard data)

Number of tuberculosis cases per 100,000 population | 2006

Source: World Health Organization, *Global Atlas of Infectious Diseases* database (May 2008); national sources.

4.05 Business impact of HIV/AIDS

How serious do you consider the impact of HIV/AIDS on your company in the next 5 years? (1 = extremely serious, 7 = not a problem)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

4.06 HIV prevalence (hard data)

HIV prevalence as a percentage of adults aged 15–49 years | 2007

Source: UNAIDS, *2008 Report on the Global AIDS Epidemic;* UNDP, *Human Development Report 2006;* national sources.

4.07 Infant mortality (hard data)

Infant (children aged 0–12 months) mortality per 1,000 live births | 2005

Source: World Health Organization, *WHO Statistical Information System (WHOSIS)* (May 2008); national sources.

4.08 Life expectancy (hard data)

Life expectancy at birth (years) | 2006

Source: World Health Organization, *WHO Statistical Information System (WHOSIS)* (May 2008); UNDP, *Human Development Report 2007/2008* online database (May 2008); national sources.

4.09 Quality of primary education

Primary schools in your country are (1 = of poor quality, 7 = among the best in the world)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

4.10 Primary enrollment (hard data)

Net primary education enrollment rate | 2006

According to the World Bank's *World Development Indicators,* this corresponds to the ratio of children of official school age (as defined by the national education system) who are enrolled in school to the population of the corresponding official school age. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.

Source: UNESCO Institute for Statistics (June 2008); The World Bank, *World Development Indicators 2008;* national sources.

4.11 Education expenditure (hard data)

Adjusted savings: Education expenditure as percentage of GNI | 2006

This is current operating expenditures in education, including wages and salaries and excluding capital investments in buildings and equipment.

Source: The World Bank, *World Development Indicators 2008;* national sources.

5th pillar: Higher education and training

5.01 Secondary enrollment (hard data)

Gross secondary education enrollment rate | 2006

According to the World Bank's *World Development Indicators,* this corresponds to the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the secondary education level. Secondary education completes the provision of basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachers.

Source: UNESCO Institute for Statistics (June 2008); The World Bank, *World Development Indicators 2008;* national sources.

5.02 Tertiary enrollment (hard data)

Gross tertiary education enrollment rate | 2006

According to the World Bank's *World Development Indicators,* this corresponds to the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the tertiary education level. Tertiary education, whether or not leading to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level.

Source: UNESCO Institute for Statistics (June 2008); The World Bank, *World Development Indicators 2008;* national sources.

5.03 Quality of the educational system

The educational system in your country (1 = does not meet the needs of a competitive economy, 7 = meets the needs of a competitive economy)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

5.04 Quality of math and science education

Math and science education in your country's schools (1 = lag far behind most other countries, 7 = are among the best in the world)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

5.05 Quality of management schools

Management or business schools in your country are (1 = limited or of poor quality, 7 = among the best in the world)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

5.06 Internet access in schools

Internet access in schools is (1 = very limited, 7 = extensive—most children have frequent access)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

5.07 Local availability of specialized research and training services

In your country, specialized research and training services are (1 = not available, 7 = available from world-class local institutions)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

5.08 Extent of staff training

The general approach of companies in your country to human resources is (1 = to invest little in training and employee development, 7 = to invest heavily to attract, train, and retain employees)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

6th pillar: Goods market efficiency

6.01 Intensity of local competition

Competition in the local market is (1 = limited in most industries, 7 = intense in most industries)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

6.02 Extent of market dominance

Corporate activity in your country is (1 = dominated by a few business groups, 7 = spread among many firms)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

6.03 Effectiveness of anti-monopoly policy

Anti-monopoly policy in your country is (1 = lax and not effective at promoting competition, 7 = effective and promotes competition)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

6.04 Extent and effect of taxation

The level of taxes in your country (1 = significantly limits the incentives to work or invest, 7 = has little impact on the incentives to work or invest)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008

6.05 Total tax rate (hard data)

This variable is a combination of profit tax (% of profits), labor tax and contribution (% of profits), and other taxes (% of profits) | 2007

Source: The World Bank, *Doing Business 2008*.

6.06 Number of procedures required to start a business (hard data)

Number of procedures required to start a business | 2007

Source: The World Bank, *Doing Business 2008*.

6.07 Time required to start a business (hard data)

Number of days required to start a business | 2007

Source: The World Bank, *Doing Business 2008*.

6.08 Agricultural policy costs

Agricultural policy in your country (1 = is excessively burdensome for the economy, 7 = balances the interests of taxpayers, consumers, and producers)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

6.09 Prevalence of trade barriers

In your country, tariff and non-tariff barriers significantly reduce the ability of imported goods to compete in the domestic market (1 = strongly agree, 7 = strongly disagree)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

6.10 Trade-weighted tariff rate (hard data)

The average rate of duty per imported value unit | 2007

This variable measures the average rate of duty per imported value unit weighted by 2006 imports value.

Source: International Trade Centre.

6.11 Prevalence of foreign ownership

Foreign ownership of companies in your country is (1 = rare and limited, 7 = prevalent and encouraged)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

6.12 Business impact of rules on FDI

In your country, rules governing foreign direct investment (1 = discourage foreign direct investment, 7 = encourage foreign direct investment)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

6.13 Burden of customs procedures

Customs procedures (formalities regulating the entry and exit of merchandise) in your country are (1 = extremely slow and cumbersome, 7 = rapid and efficient)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

6.14 Degree of customer orientation

Customer orientation: Firms in your country (1 = generally treat their customers badly, 7 = are highly responsive to customers and customer retention)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

6.15 Buyer sophistication

Buyers in your country make purchasing decisions (1 = based solely on the lowest price, 7 = based on a sophisticated analysis of performance attributes)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

7th pillar: Labor market efficiency

7.01 Cooperation in labor-employer relations

Labor-employer relations in your country are (1 = generally confrontational, 7 = generally cooperative)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

7.02 Flexibility of wage determination

In your country, wages are (1 = set by a centralized bargaining process, 7 = up to each individual company)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

7.03 Non-wage labor costs (hard data)

This variable estimates social security payments and payroll taxes associated with hiring an employee in fiscal year 2006, expressed as a percentage of the worker's salary | 2007

Social security payments include retirement fund, sickness, maternity and health insurance, workplace injury, family allowance, and other obligatory contributions.

Source: The World Bank, *Doing Business 2008*.

7.04 Rigidity of employment (hard data)

Rigidity of Employment Index on a 0–100 (worst) scale | 2007

This index is the average of three subindexes: Difficulty of hiring, Rigidity of hours, and Difficulty of firing. The three subindexes have several components and all take values between 0 and 100, with higher values indicating more rigid regulation.

Source: The World Bank, *Doing Business 2008*.

7.05 Hiring and firing practices

The hiring and firing of workers is (1 = impeded by regulations, 7 = flexibly determined by employers)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

7.06 Firing costs (hard data)

Firing costs (in weeks of wages) | 2007

This variable estimates the cost of advance notice requirements, severance payments, and penalties due when terminating a redundant worker, expressed in weekly wages.

Source: The World Bank, *Doing Business 2008*.

7.07 Pay and productivity

In your country, pay is (1 = not related to worker productivity, 7 = strongly related to worker productivity)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

7.08 Reliance on professional management

Senior management positions in your country are (1 = usually held by relatives or friends without regard to merit, 7 = mostly held by professional managers chosen based for their superior qualification)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

7.09 Brain drain

Your country's talented people (1 = normally leave to pursue opportunities in other countries, 7 = almost always remain in the country)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

7.10 Female participation in labor force (hard data)

Female-male participation ratio in the labor force | 2006

This measure is the ratio of the percentage of women aged 14–65 participating in the labor force divided by the percentage of men aged 14–65 participating in the labor force.

Source: International Labour Organization, *Key Indicators of the Labour Market (KILM) 5th Edition* (2006).

8th pillar: Financial market sophistication

8.01 Financial market sophistication

The level of sophistication of financial markets in your country is (1 = poor by international standards, 7 = excellent by international standards)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

8.02 Financing through local equity market

Raising money by issuing shares on the stock market in your country is (1 = impossible, 7 = very easy)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

8.03 Ease of access to loans

How easy is it to obtain a bank loan in your country with only a good business plan and no collateral? (1 = impossible, 7 = very easy)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

8.04 Venture capital availability

In your country, how easy is it for entrepreneurs with innovative but risky projects to find venture capital? (1 = impossible, 7 = very easy)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

8.05 Restriction on capital flows

The inflow and outflow of capital into and from your country is (1 = highly restricted by law, 7 = not restricted by law)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

8.06 Strength of investor protection (hard data)

Strength of Investor Protection Index on a 0–10 (best) scale | 2007

This variable is a combination of the Extent of disclosure index (transparency of transactions), the Extent of director liability index (liability for self-dealing), and the Ease of shareholder suit index (shareholders' ability to sue officers and directors for misconduct)).

Source: The World Bank, *Doing Business 2008*.

8.07 Soundness of banks

Banks in your country are (1 = insolvent and may require a government bailout, 7 = generally healthy with sound balance sheets)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

8.08 Regulation of securities exchanges

Regulation of securities exchanges in your country is (1 = not transparent, ineffective, and subject to undue influence from industry and government, 7 = transparent, effective, and independent of undue influence from industry and government)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

8.09 Legal rights index (hard data)

Strength of legal rights index on a 0–10 (best) scale | 2007

This index measures the degree to which collateral and bankruptcy laws protect borrowers and lenders' rights and thus facilitate lending.

Source: The World Bank, *Doing Business 2008*.

9th pillar: Technological readiness

9.01 Availability of latest technologies

In your country, the latest technologies are (1 = not widely available or used, 7 = widely available and used)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

9.02 Firm-level technology absorption

Companies in your country are (1 = not able to absorb new technology, 7 = aggressive in absorbing new technology)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

9.03 Laws relating to ICT

Laws relating to the use of information technology (electronic commerce, digital signatures, consumer protection) are (1 = nonexistent, 7 = well developed and enforced)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

9.04 FDI and technology transfer

Foreign direct investment in your country (1 = brings little new technology, 7 = is an important source of new technology)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

9.05 Mobile telephone subscribers (hard data)

Mobile telephone subscribers per 100 population | 2006

The term *subscribers* refers to users of mobile telephones subscribing to an automatic public mobile telephone service that provides access to the public switched telephone network using cellular technology. This can include analogue and digital cellular systems but should not include non-cellular systems. Subscribers to fixed wireless, public mobile data services, or radio paging services are not included.

Source: International Telecommunication Union, *World Telecommunication Indicators 2008* (June 2008 update); national sources.

9.06 Internet users (hard data)

Internet users per 100 population | 2006

Internet users are people with access to the worldwide network.

Source: International Telecommunication Union, *World Telecommunication Indicators 2008* (June 2008 update); national sources.

9.07 Personal computers (hard data)

Personal computers per 100 population | 2006

Personal computers are self-contained computers designed to be used by a single individual.

Source: International Telecommunication Union, *World Telecommunication Indicators 2008* (June 2008 update); national sources.

9.08 Broadband Internet subscribers (hard data)

Broadband internet subscribers per 100 population | 2006

The International Telecommunication Union considers broadband to be any dedicated connection to the Internet of 256 kilobits per second or faster, in both directions. *Broadband subscribers* refers to the sum of DSL, cable modem, and other broadband (for example, fiber optic, fixed wireless, apartment LANs, satellite connections) subscribers.

Source: International Telecommunication Union, *World Telecommunication Indicators 2008* (June 2008 update); national sources.

10th pillar: Market size

10.01 Domestic market size index (hard data)

Sum of gross domestic product plus value of imports of goods and services, minus value of exports of goods and services, normalized on a 1–7 (best) scale | 2007

The size of the domestic market is calculated as the natural log of the sum of the gross domestic product valued at PPP plus the total value (PPP estimates) of imports of goods and services, minus the total value (PPP estimates) of exports of goods and services. Data are then normalized on a 1–7 scale. PPP estimates of imports and exports are obtained by taking the product of exports as a percentage of GDP and GDP valued at PPP.

Source: Authors' calculations; IMF, *World Economic Outlook Database* (April 2008); Economist Intelligence Unit, *CountryData Database* (May 2008); The World Bank, *World Development Indicators 2008;* national sources.

10.02 Foreign market size index (hard data)

Value of exports of goods and services, normalized on a 1–7 (best) scale | 2007

The size of the foreign market is estimated as the natural log of the total value (PPP estimates) of exports of goods and services, normalized on a 1–7 scale. PPP estimates of exports is obtained by taking the product of exports as a percentage of GDP and GDP valued at PPP.

Source: Authors' calculations; IMF, *World Economic Outlook Database* (April 2008); Economist Intelligence Unit, *CountryData Database* (May 2008); The World Bank, *World Development Indicators 2008;* national sources.

10.03 GDP valued at PPP (hard data)

Gross domestic product valued at purchasing power parity in millions of international dollars | 2007

Source: IMF, *World Economic Outlook Database* (April 2008); national sources.

10.04 Imports as a percentage of GDP (hard data)

Imports of goods and services as a percentage of GDP | 2007

Source: Economist Intelligence Unit, *CountryData Database* (May 2008); The World Bank, *World Development Indicators 2008;* national sources.

10.05 Exports as a percentage of GDP (hard data)

Exports of goods and services as a percentage of GDP | 2007

Source: Economist Intelligence Unit, *CountryData Database* (May 2007); The World Bank, *World Development Indicators 2008;* national sources.

11th pillar: Business sophistication

11.01 Local supplier quantity

Local suppliers in your country are (1 = largely nonexistent, 7 = numerous and include the most important materials, components, equipment, and services)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

11.02 Local supplier quality

The quality of local suppliers in your country is (1 = very poor, 7 = very good)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

11.03 State of cluster development

In your country's economy, well-developed and deep clusters are (1 = rare or absent, 7 = widespread in many fields)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

11.04 Nature of competitive advantage

Competitiveness of your country's companies in international markets is primarily due to (1 = low-cost or local natural resources, 7 = unique products and processes)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

11.05 Value chain breadth

Exporting companies in your country are (1 = primarily involved in individual steps of the value chain, e.g., resource extraction or production, 7 = present across the entire value chain, e.g., do not only produce but also perform product design, marketing sales, logistics and after-sales services)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

11.06 Control of international distribution

International distribution and marketing from your country (1 = take place through foreign companies, 7 = are owned and controlled by local companies)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

11.07 Production process sophistication

In your country, production processes use (1 = labor-intensive methods or previous generations of process technology, 7 = the world's best and most efficient process technology)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

11.08 Extent of marketing

In your country, the extent of marketing is (1 = limited and primitive, 7 = extensive and employs the world's most sophisticated tools and techniques)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

11.09 Willingness to delegate authority

In your company, willingness to delegate authority to subordinates is (1 = low—top management controls all important decisions, 7 = high—authority is mostly delegated to business unit heads and other lower-level managers)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

12th pillar: Innovation

12.01 Capacity for innovation

In your country, companies obtain technology (1 = exclusively from licensing or imitating foreign companies, 7 = by conducting formal research and pioneering their own new products and processes)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

12.02 Quality of scientific research institutions

Scientific research institutions in your country (e.g., university laboratories, government laboratories) are (1 = nonexistent, 7 = the best in their fields internationally)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

12.03 Company spending on R&D

Companies in your country (1 = do not spend money on research and development, 7 = spend heavily on research and development relative to international peers)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

12.04 University-industry research collaboration

In the area of R&D, collaboration between the business community and local universities is (1 = minimal or nonexistent, 7 = intensive and ongoing)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

12.05 Government procurement of advanced technology products

In your country, government procurement decisions result in technological innovation (1 = strongly disagree, 7 = strongly agree)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

12.06 Availability of scientists and engineers

Scientists and engineers in your country are (1 = nonexistent or rare, 7 = widely available)

Source: World Economic Forum, Executive Opinion Survey 2007, 2008.

12.07 Utility patents (hard data)

Number of utility patents (i.e., patents for invention) granted between January 1 and December 31, 2007, per million population | 2007

Utility patents are recorded such that the origin of the patent is determined by the first-named inventor at the time of the grant. Patents per million population are calculated by dividing the number of patents granted to a country in 2006 by that country's population in the same year.

Source: The United States Patent and Trademark Office (June 2008).

List of Countries: Competitiveness Profiles

Algeria

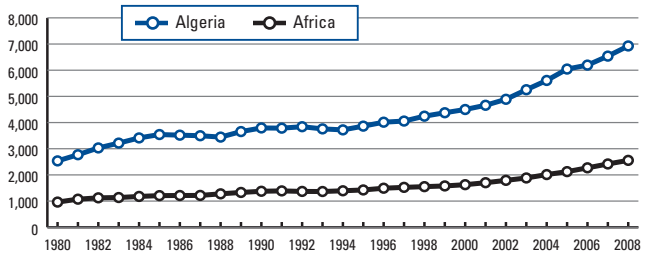
Key indicators

Population (millions), 2008 ..... 34.4
GDP (US$ billions), 2007 ..... 134.3
GDP (PPP) per capita (int'l $), 2007 ..... 6538.7
Sectoral value-added (% GDP), 2005
- Agriculture 8.5
- Industry 61.5
- Services 30.1

Human Development Index, 2006
- Score (0–1, 1 is best) 0.75
- Rank (out of 179 economies) 100

Source: UNFPA, IMF, EIU, World Bank, UNDP.

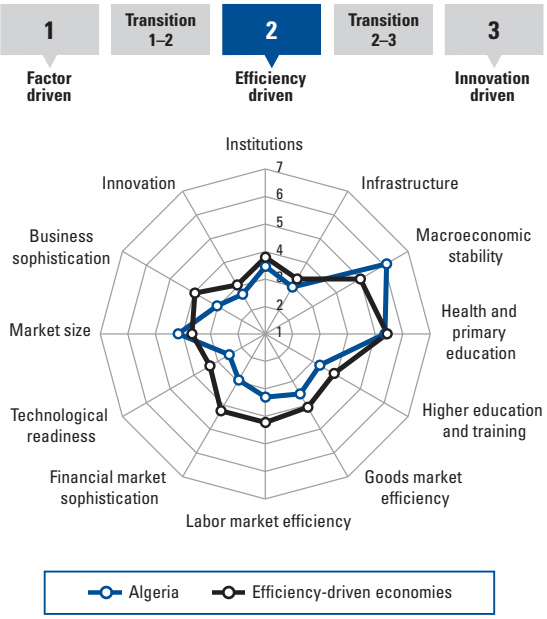
GDP (PPP) per capita (int'l $), 1980–2008



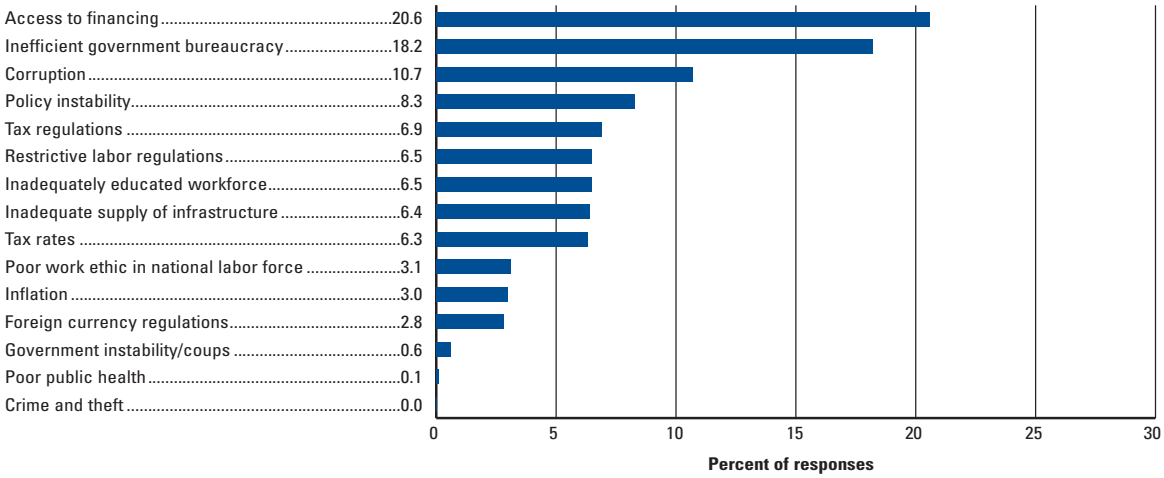
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**99**	**3.7**
GCI 2007–2008 (out of 131)	81	3.9
GCI 2006–2007 (out of 122)	77	3.9
Basic requirements	**61**	**4.5**
1st pillar: Institutions	102	3.4
2nd pillar: Infrastructure	84	3.0
3rd pillar: Macroeconomic stability	5	6.1
4th pillar: Health and primary education	76	5.3
Efficiency enhancers	**113**	**3.3**
5th pillar: Higher education and training	102	3.3
6th pillar: Goods market efficiency	124	3.5
7th pillar: Labor market efficiency	132	3.3
8th pillar: Financial market sophistication	132	2.9
9th pillar: Technological readiness	114	2.5
10th pillar: Market size	51	4.2
Innovation and sophistication factors	**126**	**2.8**
11th pillar: Business sophistication	132	3.0
12th pillar: Innovation	113	2.7

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Algeria

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	3.6	115
Intellectual property protection	2.5	120
Diversion of public funds	3.0	94
Public trust of politicians	2.6	72
Judicial independence	3.1	100
Favoritism in decisions of government officials	3.4	52
Wastefulness of government spending	3.7	48
Burden of government regulation	2.5	117
Efficiency of legal framework	3.1	90
Transparency of government policymaking	3.4	112
Business costs of terrorism	4.3	123
Business costs of crime and violence	4.4	85
Organized crime	4.8	86
Reliability of police services	4.2	72
Ethical behavior of firms	3.7	100
Strength of auditing and reporting standards	3.5	125
Efficacy of corporate boards	3.4	132
Protection of minority shareholders' interests	3.9	104
2nd pillar: Infrastructure		
Quality of overall infrastructure	3.1	85
Quality of roads	3.3	77
Quality of railroad infrastructure	2.6	63
Quality of port infrastructure	3.1	103
Quality of air transport infrastructure	3.5	106
Available seat kilometers per week (millions)*	126.2	72
Quality of electricity supply	4.5	74
Main telephone lines (per 100 population)*	8.5	95
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	11.4	8
National savings rate (% GDP)*	53.7	4
Inflation (%)*	3.7	55
Interest rate spread (%)*	6.3	77
Government gross debt (% GDP)*	19.0	23
4th pillar: Health and primary education		
Business impact of malaria	5.3	97
Malaria incidence (cases per 100,000 population)*	1.0	68
Business impact of tuberculosis	4.8	101
Tuberculosis incidence (cases per 100,000 population)*	56.0	67
Business impact of HIV/AIDS	4.9	87
HIV prevalence (% adult population)*	0.1	23
Infant mortality (deaths per 1,000 live births)*	34.0	95
Life expectancy at birth (years)*	71.0	76
Quality of primary education	2.8	103
Primary education enrollment (net rate, %)*	95.2	50
Education expenditure (% GNI)*	4.5	56
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	83.2	78
Tertiary education enrollment (gross rate, %)*	21.8	80
Quality of the educational system	2.5	122
Quality of math and science education	3.4	99
Quality of management schools	3.1	117
Internet access in schools	2.2	113
Local availability of research and training services	3.2	111
Extent of staff training	2.8	128

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.2	113
Extent of market dominance	3.9	63
Effectiveness of anti-monopoly policy	3.1	114
Extent and effect of taxation	3.7	58
Total tax rate (% profits)*	72.6	118
Number of procedures required to start a business*	14.0	117
Number of days required to start a business*	24.0	51
Agricultural policy costs	3.5	106
Prevalence of trade barriers	4.3	87
Trade-weighted tariff rate (% duty)*	15.6	128
Prevalence of foreign ownership	3.4	130
Business impact of rules on FDI	4.3	115
Burden of customs procedures	2.6	126
Degree of customer orientation	3.3	131
Buyer sophistication	3.2	91
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	3.5	129
Flexibility of wage determination	3.4	125
Non-wage labor costs (% worker's salary)*	27.0	106
Rigidity of Employment Index (0–100, 100 is worst)*	48.0	99
Hiring and firing practices	2.9	119
Firing costs (in weeks of wages)*	17.0	28
Pay and productivity	2.9	132
Reliance on professional management	3.7	112
Brain drain	2.3	123
Female-to-male participation ratio in labor force*	0.5	117
8th pillar: Financial market sophistication		
Financial market sophistication	2.1	130
Financing through local equity market	2.8	118
Ease of access to loans	2.2	122
Venture capital availability	2.2	118
Restriction on capital flows	2.8	131
Strength of Investor Protection (0–10, 10 is best)*	5.3	50
Soundness of banks	3.9	134
Regulation of securities exchanges	2.8	128
Strength of Legal Rights (0–10, 10 is best)*	3.0	93
9th pillar: Technological readiness		
Availability of latest technologies	3.4	117
Firm-level technology absorption	3.6	128
Laws relating to ICT	2.3	129
FDI and technology transfer	3.6	132
Mobile telephone subscribers (per 100 population)*	63.0	71
Internet users (per 100 population)*	7.4	98
Personal computers (per 100 population)*	1.1	115
Broadband internet subscribers (per 100 population)	0.5	82
10th pillar: Market size		
Domestic market size index*	3.9	52
Foreign market size index*	5.0	41
11th pillar: Business sophistication		
Local supplier quantity	4.1	113
Local supplier quality	3.3	130
State of cluster development	2.6	120
Nature of competitive advantage	2.5	130
Value chain breadth	2.3	132
Control of international distribution	3.3	126
Production process sophistication	2.5	122
Extent of marketing	2.7	130
Willingness to delegate authority	2.5	132
12th pillar: Innovation		
Capacity for innovation	2.1	133
Quality of scientific research institutions	3.2	108
Company spending on R&D	2.6	116
University-industry research collaboration	2.3	124
Gov't procurement of advanced tech products	2.9	118
Availability of scientists and engineers	4.6	41
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Benin

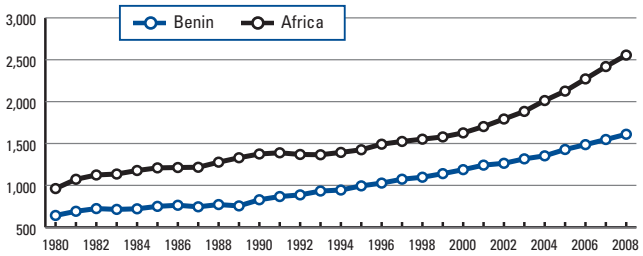
Key indicators

Population (millions), 2008 ..... 9.3
GDP (US$ billions), 2007 ..... 5.6
GDP (PPP) per capita (int'l $), 2007 ..... 1,547.8
Sectoral value-added (% GDP), 2005
- Agriculture 32.2
- Industry 13.4
- Services 54.4

Human Development Index, 2006 .....
- Score (0–1, 1 is best) 0.46
- Rank (out of 179 economies) 161

Source: UNFPA, IMF, EIU, World Bank, UNDP.

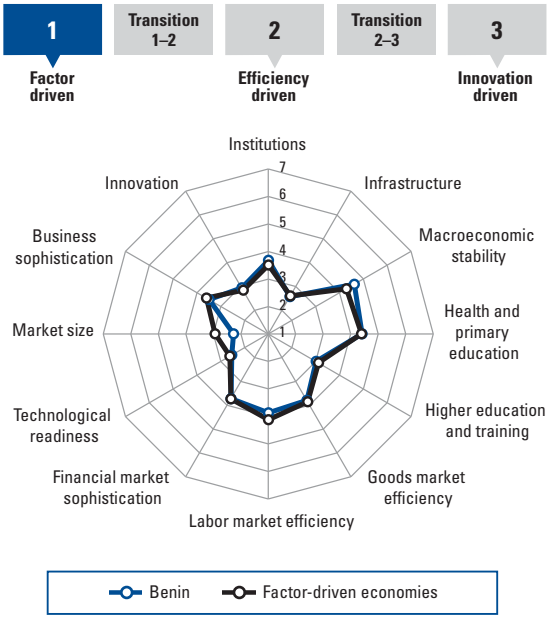
GDP (PPP) per capita (int'l $), 1980–2008



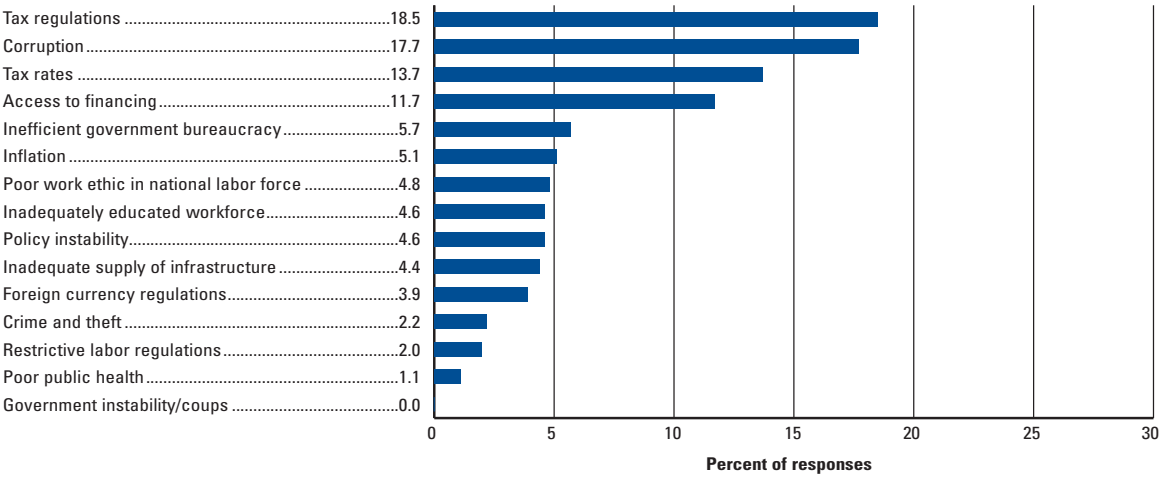
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**106**	**3.6**
GCI 2007–2008 (out of 131)	108	3.5
GCI 2006–2007 (out of 122)	106	3.4
Basic requirements	**103**	**3.8**
1st pillar: Institutions	85	3.7
2nd pillar: Infrastructure	106	2.6
3rd pillar: Macroeconomic stability	95	4.6
4th pillar: Health and primary education	110	4.4
Efficiency enhancers	**123**	**3.2**
5th pillar: Higher education and training	114	3.0
6th pillar: Goods market efficiency	107	3.8
7th pillar: Labor market efficiency	118	3.9
8th pillar: Financial market sophistication	99	3.7
9th pillar: Technological readiness	113	2.5
10th pillar: Market size	123	2.3
Innovation and sophistication factors	**100**	**3.2**
11th pillar: Business sophistication	103	3.5
12th pillar: Innovation	95	2.9

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Benin

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	3.6	110
Intellectual property protection	3.1	91
Diversion of public funds	2.6	114
Public trust of politicians	2.7	68
Judicial independence	3.7	74
Favoritism in decisions of government officials	3.2	60
Wastefulness of government spending	4.0	35
Burden of government regulation	2.8	103
Efficiency of legal framework	3.5	70
Transparency of government policymaking	4.0	75
Business costs of terrorism	5.2	95
Business costs of crime and violence	4.1	96
Organized crime	4.2	108
Reliability of police services	4.8	44
Ethical behavior of firms	3.8	88
Strength of auditing and reporting standards	3.9	101
Efficacy of corporate boards	4.4	92
Protection of minority shareholders' interests	4.6	61
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.8	95
Quality of roads	2.7	97
Quality of railroad infrastructure	1.8	87
Quality of port infrastructure	3.2	96
Quality of air transport infrastructure	3.7	100
Available seat kilometers per week (millions)*	11.9	120
Quality of electricity supply	2.4	121
Main telephone lines (per 100 population)*	0.9	120
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–2.0	88
National savings rate (% GDP)*	11.5	121
Inflation (%)*	2.0	19
Interest rate spread (%)*	9.5	109
Government gross debt (% GDP)*	n/a	n/a
4th pillar: Health and primary education		
Business impact of malaria	3.7	124
Malaria incidence (cases per 100,000 population)*	10,491.5	123
Business impact of tuberculosis	4.2	118
Tuberculosis incidence (cases per 100,000 population)*	90.0	85
Business impact of HIV/AIDS	3.8	113
HIV prevalence (% adult population)*	1.2	105
Infant mortality (deaths per 1,000 live births)*	89.0	122
Life expectancy at birth (years)*	55.0	117
Quality of primary education	3.4	78
Primary education enrollment (net rate, %)*	80.2	110
Education expenditure (% GNI)*	3.6	86
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	32.5	117
Tertiary education enrollment (gross rate, %)*	5.1	116
Quality of the educational system	3.2	89
Quality of math and science education	4.1	61
Quality of management schools	4.2	56
Internet access in schools	2.5	100
Local availability of research and training services	3.7	85
Extent of staff training	2.9	122

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.8	82
Extent of market dominance	3.7	70
Effectiveness of anti-monopoly policy	3.9	68
Extent and effect of taxation	2.7	120
Total tax rate (% profits)*	73.3	119
Number of procedures required to start a business*	7.0	34
Number of days required to start a business*	31.0	70
Agricultural policy costs	3.3	119
Prevalence of trade barriers	4.5	76
Trade-weighted tariff rate (% duty)*	7.8	84
Prevalence of foreign ownership	4.8	90
Business impact of rules on FDI	4.5	105
Burden of customs procedures	2.7	119
Degree of customer orientation	3.9	113
Buyer sophistication	2.9	108
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.3	90
Flexibility of wage determination	5.6	27
Non-wage labor costs (% worker's salary)*	29.0	110
Rigidity of Employment Index (0–100, 100 is worst)*	40.0	78
Hiring and firing practices	4.0	57
Firing costs (in weeks of wages)*	36.0	65
Pay and productivity	3.5	112
Reliance on professional management	4.0	97
Brain drain	2.5	109
Female-to-male participation ratio in labor force*	0.6	99
8th pillar: Financial market sophistication		
Financial market sophistication	3.3	100
Financing through local equity market	3.5	100
Ease of access to loans	2.4	112
Venture capital availability	2.4	106
Restriction on capital flows	3.9	102
Strength of Investor Protection (0–10, 10 is best)*	3.3	112
Soundness of banks	5.9	46
Regulation of securities exchanges	3.7	102
Strength of Legal Rights (0–10, 10 is best)*	4.0	72
9th pillar: Technological readiness		
Availability of latest technologies	3.8	107
Firm-level technology absorption	4.4	88
Laws relating to ICT	3.4	88
FDI and technology transfer	4.2	107
Mobile telephone subscribers (per 100 population)*	12.1	119
Internet users (per 100 population)*	1.4	120
Personal computers (per 100 population)*	0.6	122
Broadband internet subscribers (per 100 population)	0.0	113
10th pillar: Market size		
Domestic market size index*	2.2	119
Foreign market size index*	2.5	127
11th pillar: Business sophistication		
Local supplier quantity	4.0	115
Local supplier quality	4.2	89
State of cluster development	2.8	113
Nature of competitive advantage	3.4	75
Value chain breadth	3.5	74
Control of international distribution	3.8	96
Production process sophistication	2.9	104
Extent of marketing	3.3	116
Willingness to delegate authority	2.7	127
12th pillar: Innovation		
Capacity for innovation	2.9	84
Quality of scientific research institutions	3.4	97
Company spending on R&D	2.8	91
University-industry research collaboration	2.6	112
Gov't procurement of advanced tech products	3.8	49
Availability of scientists and engineers	4.0	78
USPTO utility patents (per million population)*	0.1	74

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Botswana

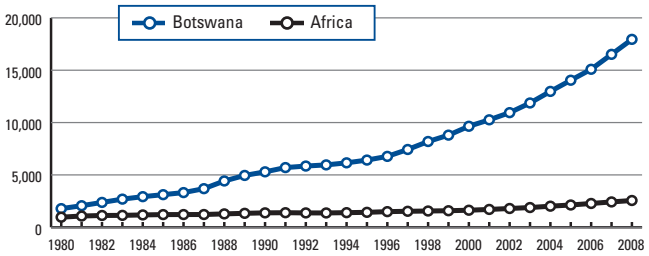
Key indicators

Population (millions), 2008 ..... 1.9
GDP (US$ billions), 2007 ..... 12.4
GDP (PPP) per capita (int'l $), 2007 ..... 16,516.1
Sectoral value-added (% GDP), 2007
- Agriculture 1.9
- Industry 55.2
- Services 42.9

Human Development Index, 2006
- Score (0–1, 1 is best) 0.66
- Rank (out of 179 economies) 126

Source: UNFPA, IMF, EIU, World Bank, UNDP.

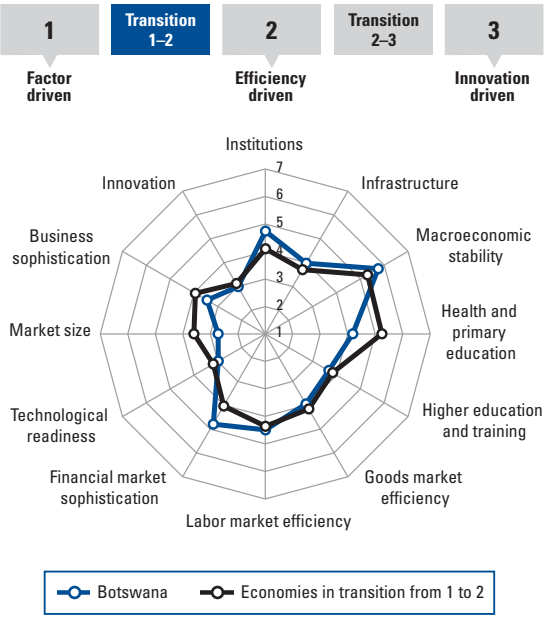
GDP (PPP) per capita (int'l $), 1980–2008



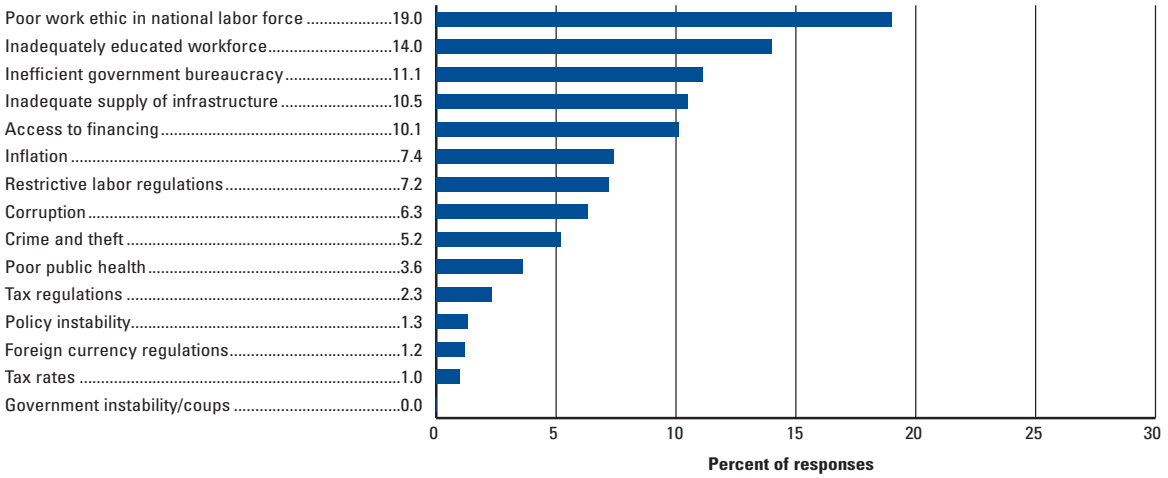
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**56**	**4.2**
GCI 2007–2008 (out of 131)	76	4.0
GCI 2006–2007 (out of 122)	57	4.1
Basic requirements	**53**	**4.6**
1st pillar: Institutions	36	4.7
2nd pillar: Infrastructure	52	4.0
3rd pillar: Macroeconomic stability	22	5.7
4th pillar: Health and primary education	112	4.2
Efficiency enhancers	**82**	**3.8**
5th pillar: Higher education and training	87	3.7
6th pillar: Goods market efficiency	93	3.9
7th pillar: Labor market efficiency	52	4.5
8th pillar: Financial market sophistication	40	4.8
9th pillar: Technological readiness	89	3.0
10th pillar: Market size	101	2.7
Innovation and sophistication factors	**98**	**3.2**
11th pillar: Business sophistication	106	3.5
12th pillar: Innovation	83	3.0

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Botswana

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	5.2	48
Intellectual property protection	3.3	77
Diversion of public funds	4.9	28
Public trust of politicians	4.4	22
Judicial independence	5.3	26
Favoritism in decisions of government officials	3.8	37
Wastefulness of government spending	4.6	21
Burden of government regulation	3.6	38
Efficiency of legal framework	4.7	33
Transparency of government policymaking	4.6	39
Business costs of terrorism	6.0	46
Business costs of crime and violence	4.4	88
Organized crime	5.5	57
Reliability of police services	4.7	48
Ethical behavior of firms	4.8	34
Strength of auditing and reporting standards	5.3	40
Efficacy of corporate boards	4.9	54
Protection of minority shareholders' interests	4.9	52
2nd pillar: Infrastructure		
Quality of overall infrastructure	4.6	43
Quality of roads	4.5	44
Quality of railroad infrastructure	3.6	36
Quality of port infrastructure	4.2	60
Quality of air transport infrastructure	3.8	97
Available seat kilometers per week (millions)*	2.7	131
Quality of electricity supply	4.5	73
Main telephone lines (per 100 population)*	7.5	97
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	7.1	13
National savings rate (% GDP)*	41.2	13
Inflation (%)*	7.1	90
Interest rate spread (%)*	7.6	96
Government gross debt (% GDP)*	2.7	4
4th pillar: Health and primary education		
Business impact of malaria	4.8	109
Malaria incidence (cases per 100,000 population)*	1,267.2	111
Business impact of tuberculosis	3.9	124
Tuberculosis incidence (cases per 100,000 population)*	551.0	128
Business impact of HIV/AIDS	2.6	128
HIV prevalence (% adult population)*	23.9	134
Infant mortality (deaths per 1,000 live births)*	86.0	120
Life expectancy at birth (years)*	52.0	120
Quality of primary education	3.8	66
Primary education enrollment (net rate, %)*	84.0	107
Education expenditure (% GNI)*	8.6	2
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	76.5	89
Tertiary education enrollment (gross rate, %)*	5.1	115
Quality of the educational system	3.8	50
Quality of math and science education	3.8	82
Quality of management schools	3.4	105
Internet access in schools	2.5	98
Local availability of research and training services	3.3	104
Extent of staff training	3.8	69

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.8	79
Extent of market dominance	3.2	102
Effectiveness of anti-monopoly policy	3.3	103
Extent and effect of taxation	4.9	19
Total tax rate (% profits)*	17.2	5
Number of procedures required to start a business*	11.0	91
Number of days required to start a business*	108.0	124
Agricultural policy costs	4.2	48
Prevalence of trade barriers	5.0	42
Trade-weighted tariff rate (% duty)*	4.6	56
Prevalence of foreign ownership	5.7	38
Business impact of rules on FDI	5.6	33
Burden of customs procedures	4.0	59
Degree of customer orientation	3.6	126
Buyer sophistication	3.3	84
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.4	72
Flexibility of wage determination	4.5	100
Non-wage labor costs (% worker's salary)*	0.0	1
Rigidity of Employment Index (0–100, 100 is worst)*	20.0	22
Hiring and firing practices	3.6	86
Firing costs (in weeks of wages)*	90.0	105
Pay and productivity	3.8	94
Reliance on professional management	5.2	38
Brain drain	3.7	50
Female-to-male participation ratio in labor force*	0.7	90
8th pillar: Financial market sophistication		
Financial market sophistication	4.2	71
Financing through local equity market	4.6	62
Ease of access to loans	3.7	50
Venture capital availability	3.4	45
Restriction on capital flows	5.7	21
Strength of Investor Protection (0–10, 10 is best)*	4.3	86
Soundness of banks	6.1	38
Regulation of securities exchanges	4.8	60
Strength of Legal Rights (0–10, 10 is best)*	7.0	16
9th pillar: Technological readiness		
Availability of latest technologies	4.7	64
Firm-level technology absorption	4.6	73
Laws relating to ICT	3.2	92
FDI and technology transfer	4.7	80
Mobile telephone subscribers (per 100 population)*	46.8	86
Internet users (per 100 population)*	4.5	109
Personal computers (per 100 population)*	5.1	83
Broadband internet subscribers (per 100 population)	0.1	99
10th pillar: Market size		
Domestic market size index*	2.4	109
Foreign market size index*	3.7	91
11th pillar: Business sophistication		
Local supplier quantity	3.5	130
Local supplier quality	3.6	118
State of cluster development	3.3	81
Nature of competitive advantage	3.6	58
Value chain breadth	2.9	108
Control of international distribution	3.2	128
Production process sophistication	3.0	99
Extent of marketing	3.6	101
Willingness to delegate authority	3.5	101
12th pillar: Innovation		
Capacity for innovation	2.7	98
Quality of scientific research institutions	3.9	66
Company spending on R&D	2.7	95
University-industry research collaboration	3.2	66
Gov't procurement of advanced tech products	3.8	50
Availability of scientists and engineers	3.4	111
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Burkina Faso

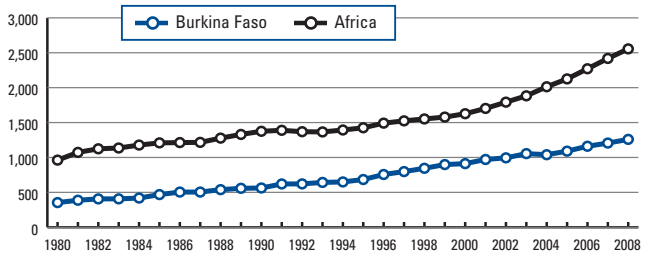
Key indicators

Population (millions), 2008 ..... 15.2
GDP (US$ billions), 2007 ..... 6.8
GDP (PPP) per capita (int'l $), 2007 ..... 1,206.5
Sectoral value-added (% GDP), 2006
- Agriculture 33.3
- Industry 22.4
- Services 44.4

Human Development Index, 2006
- Score (0–1, 1 is best) 0.37
- Rank (out of 179 economies) 173

Source: UNFPA, IMF, EIU, World Bank, UNDP.

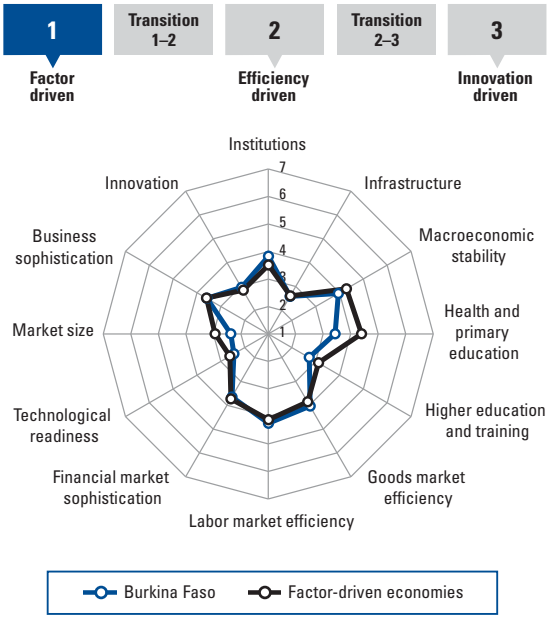
GDP (PPP) per capita (int'l $), 1980–2008



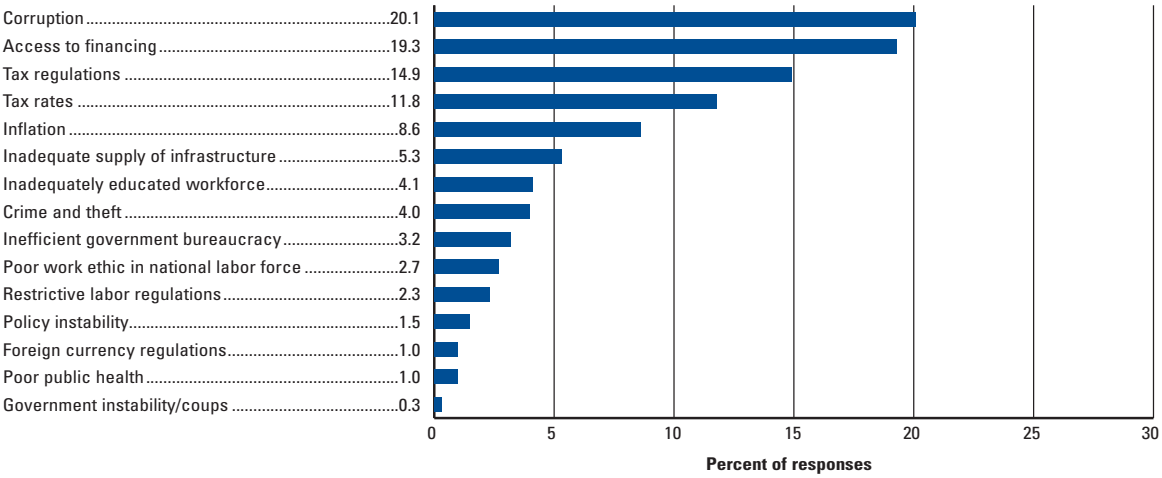
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**127**	**3.4**
GCI 2007–2008 (out of 131)	112	3.4
GCI 2006–2007 (out of 122)	114	3.3
Basic requirements	**126**	**3.4**
1st pillar: Institutions	75	3.8
2nd pillar: Infrastructure	104	2.6
3rd pillar: Macroeconomic stability	120	3.9
4th pillar: Health and primary education	131	3.4
Efficiency enhancers	**118**	**3.2**
5th pillar: Higher education and training	124	2.7
6th pillar: Goods market efficiency	83	4.0
7th pillar: Labor market efficiency	80	4.3
8th pillar: Financial market sophistication	108	3.7
9th pillar: Technological readiness	120	2.5
10th pillar: Market size	117	2.4
Innovation and sophistication factors	**95**	**3.3**
11th pillar: Business sophistication	96	3.6
12th pillar: Innovation	89	3.0

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Burkina Faso

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	4.5	72
Intellectual property protection	3.5	68
Diversion of public funds	3.2	88
Public trust of politicians	2.4	75
Judicial independence	3.3	89
Favoritism in decisions of government officials	3.2	59
Wastefulness of government spending	3.5	59
Burden of government regulation	3.5	42
Efficiency of legal framework	3.4	75
Transparency of government policymaking	4.7	34
Business costs of terrorism	5.3	86
Business costs of crime and violence	3.8	107
Organized crime	4.3	106
Reliability of police services	4.7	51
Ethical behavior of firms	3.9	79
Strength of auditing and reporting standards	4.2	93
Efficacy of corporate boards	4.3	106
Protection of minority shareholders' interests	4.6	62
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.6	100
Quality of roads	2.7	98
Quality of railroad infrastructure	2.1	75
Quality of port infrastructure	3.9	66
Quality of air transport infrastructure	3.5	107
Available seat kilometers per week (millions)*	8.9	122
Quality of electricity supply	3.2	106
Main telephone lines (per 100 population)*	0.7	125
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–6.0	128
National savings rate (% GDP)*	9.9	124
Inflation (%)*	–0.2	2
Interest rate spread (%)*	n/a	n/a
Government gross debt (% GDP)*	n/a	n/a
4th pillar: Health and primary education		
Business impact of malaria	4.0	119
Malaria incidence (cases per 100,000 population)*	12,070.3	126
Business impact of tuberculosis	4.7	104
Tuberculosis incidence (cases per 100,000 population)*	248.0	110
Business impact of HIV/AIDS	4.2	103
HIV prevalence (% adult population)*	1.6	111
Infant mortality (deaths per 1,000 live births)*	96.0	123
Life expectancy at birth (years)*	47.0	129
Quality of primary education	3.2	86
Primary education enrollment (net rate, %)*	46.9	130
Education expenditure (% GNI)*	4.5	53
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	14.5	132
Tertiary education enrollment (gross rate, %)*	2.3	127
Quality of the educational system	2.7	113
Quality of math and science education	3.6	89
Quality of management schools	3.8	79
Internet access in schools	2.0	124
Local availability of research and training services	3.7	80
Extent of staff training	2.8	125

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.5	102
Extent of market dominance	3.6	73
Effectiveness of anti-monopoly policy	3.7	73
Extent and effect of taxation	3.2	82
Total tax rate (% profits)*	48.9	84
Number of procedures required to start a business*	6.0	19
Number of days required to start a business*	18.0	38
Agricultural policy costs	4.0	63
Prevalence of trade barriers	4.5	75
Trade-weighted tariff rate (% duty)*	9.9	100
Prevalence of foreign ownership	4.7	94
Business impact of rules on FDI	4.8	93
Burden of customs procedures	3.6	73
Degree of customer orientation	4.4	86
Buyer sophistication	3.0	106
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.7	55
Flexibility of wage determination	4.7	93
Non-wage labor costs (% worker's salary)*	20.0	85
Rigidity of Employment Index (0–100, 100 is worst)*	61.0	118
Hiring and firing practices	4.0	55
Firing costs (in weeks of wages)*	34.0	60
Pay and productivity	3.4	121
Reliance on professional management	4.0	101
Brain drain	3.4	58
Female-to-male participation ratio in labor force*	0.9	24
8th pillar: Financial market sophistication		
Financial market sophistication	3.3	101
Financing through local equity market	3.6	93
Ease of access to loans	1.9	132
Venture capital availability	1.9	132
Restriction on capital flows	4.0	98
Strength of Investor Protection (0–10, 10 is best)*	3.7	107
Soundness of banks	5.6	68
Regulation of securities exchanges	4.0	95
Strength of Legal Rights (0–10, 10 is best)*	4.0	72
9th pillar: Technological readiness		
Availability of latest technologies	3.5	115
Firm-level technology absorption	4.2	99
Laws relating to ICT	3.1	100
FDI and technology transfer	4.5	95
Mobile telephone subscribers (per 100 population)*	7.5	124
Internet users (per 100 population)*	0.6	128
Personal computers (per 100 population)*	0.7	120
Broadband internet subscribers (per 100 population)	0.0	115
10th pillar: Market size		
Domestic market size index*	2.4	110
Foreign market size index*	2.3	129
11th pillar: Business sophistication		
Local supplier quantity	4.8	71
Local supplier quality	4.5	76
State of cluster development	2.7	119
Nature of competitive advantage	3.5	64
Value chain breadth	3.2	93
Control of international distribution	3.8	93
Production process sophistication	2.7	113
Extent of marketing	3.1	121
Willingness to delegate authority	2.6	131
12th pillar: Innovation		
Capacity for innovation	3.2	62
Quality of scientific research institutions	3.7	76
Company spending on R&D	2.6	110
University-industry research collaboration	2.7	108
Gov't procurement of advanced tech products	3.9	47
Availability of scientists and engineers	3.3	113
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

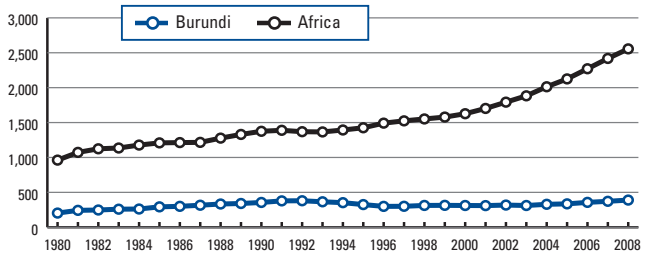
Burundi

Key indicators

Population (millions), 2008	8.9
GDP (US$ billions), 2007	1.0
GDP (PPP) per capita (int'l $), 2007	371.7
Sectoral value-added (% GDP), 2005	
Agriculture	34.8
Industry	20.0
Services	45.1
Human Development Index, 2006	
Score (0–1, 1 is best)	0.38
Rank (out of 179 economies)	172

Source: UNFPA, IMF, EIU, World Bank, UNDP.

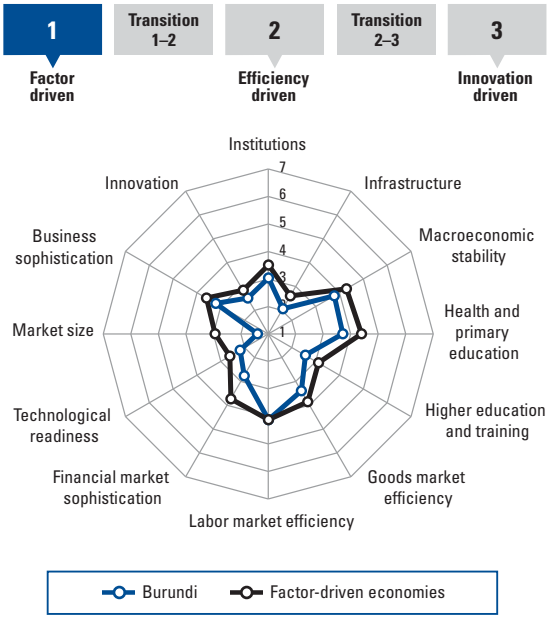
GDP (PPP) per capita (int'l $), 1980–2008



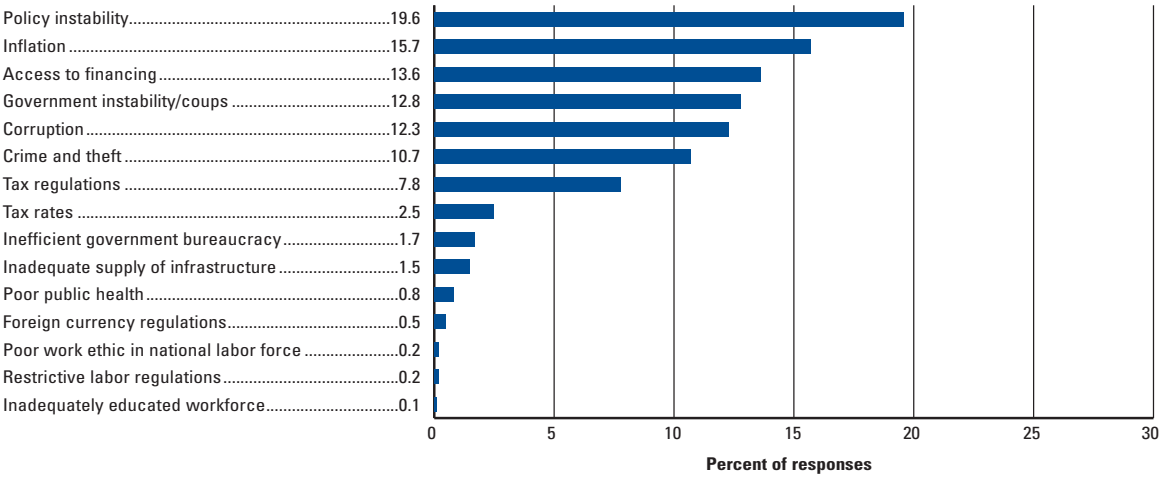
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**132**	**3.0**
GCI 2007–2008 (out of 131)	130	2.8
GCI 2006–2007 (out of 122)	122	2.7
Basic requirements	**132**	**3.1**
1st pillar: Institutions	124	3.0
2nd pillar: Infrastructure	129	2.1
3rd pillar: Macroeconomic stability	124	3.8
4th pillar: Health and primary education	124	3.7
Efficiency enhancers	**133**	**2.7**
5th pillar: Higher education and training	130	2.5
6th pillar: Goods market efficiency	128	3.4
7th pillar: Labor market efficiency	95	4.1
8th pillar: Financial market sophistication	134	2.8
9th pillar: Technological readiness	131	2.2
10th pillar: Market size	131	1.4
Innovation and sophistication factors	**125**	**2.9**
11th pillar: Business sophistication	127	3.2
12th pillar: Innovation	123	2.5

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Burundi

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	3.2	128
Intellectual property protection	2.2	126
Diversion of public funds	2.3	124
Public trust of politicians	1.9	108
Judicial independence	2.1	127
Favoritism in decisions of government officials	2.7	99
Wastefulness of government spending	2.9	100
Burden of government regulation	3.1	75
Efficiency of legal framework	2.5	123
Transparency of government policymaking	3.4	110
Business costs of terrorism	4.0	128
Business costs of crime and violence	3.8	106
Organized crime	3.7	121
Reliability of police services	3.1	108
Ethical behavior of firms	3.5	109
Strength of auditing and reporting standards	3.5	122
Efficacy of corporate boards	4.6	80
Protection of minority shareholders' interests	3.8	114
2nd pillar: Infrastructure		
Quality of overall infrastructure	1.9	129
Quality of roads	2.0	123
Quality of railroad infrastructure	n/a	n/a
Quality of port infrastructure	3.2	99
Quality of air transport infrastructure	3.5	110
Available seat kilometers per week (millions)*	1.8	132
Quality of electricity supply	2.5	119
Main telephone lines (per 100 population)*	0.4	128
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	0.7	49
National savings rate (% GDP)*	12.8	114
Inflation (%)*	8.4	105
Interest rate spread (%)*	8.0	100
Government gross debt (% GDP)*	174.1	128
4th pillar: Health and primary education		
Business impact of malaria	3.8	122
Malaria incidence (cases per 100,000 population)*	26,526.2	132
Business impact of tuberculosis	5.0	97
Tuberculosis incidence (cases per 100,000 population)*	367.0	121
Business impact of HIV/AIDS	4.1	108
HIV prevalence (% adult population)*	2.0	116
Infant mortality (deaths per 1,000 live births)*	114.0	131
Life expectancy at birth (years)*	49.0	127
Quality of primary education	2.7	112
Primary education enrollment (net rate, %)*	74.6	117
Education expenditure (% GNI)*	5.1	39
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	14.3	133
Tertiary education enrollment (gross rate, %)*	2.2	129
Quality of the educational system	2.5	123
Quality of math and science education	4.0	70
Quality of management schools	3.4	103
Internet access in schools	1.6	131
Local availability of research and training services	3.1	113
Extent of staff training	2.6	131

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.0	119
Extent of market dominance	3.0	115
Effectiveness of anti-monopoly policy	3.3	99
Extent and effect of taxation	2.8	115
Total tax rate (% profits)*	278.7	127
Number of procedures required to start a business*	11.0	91
Number of days required to start a business*	43.0	96
Agricultural policy costs	3.2	125
Prevalence of trade barriers	3.9	117
Trade-weighted tariff rate (% duty)*	11.6	109
Prevalence of foreign ownership	3.9	120
Business impact of rules on FDI	4.4	111
Burden of customs procedures	2.9	108
Degree of customer orientation	4.5	76
Buyer sophistication	2.3	133
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.3	83
Flexibility of wage determination	5.8	15
Non-wage labor costs (% worker's salary)*	7.0	24
Rigidity of Employment Index (0–100, 100 is worst)*	41.0	79
Hiring and firing practices	3.7	77
Firing costs (in weeks of wages)*	26.0	45
Pay and productivity	2.5	134
Reliance on professional management	3.4	129
Brain drain	2.1	130
Female-to-male participation ratio in labor force*	1.0	2
8th pillar: Financial market sophistication		
Financial market sophistication	2.2	129
Financing through local equity market	2.7	122
Ease of access to loans	2.1	127
Venture capital availability	2.4	109
Restriction on capital flows	3.0	128
Strength of Investor Protection (0–10, 10 is best)*	3.3	112
Soundness of banks	4.4	126
Regulation of securities exchanges	2.8	127
Strength of Legal Rights (0–10, 10 is best)*	1.0	123
9th pillar: Technological readiness		
Availability of latest technologies	2.7	132
Firm-level technology absorption	4.0	113
Laws relating to ICT	2.8	109
FDI and technology transfer	3.8	123
Mobile telephone subscribers (per 100 population)*	2.6	133
Internet users (per 100 population)*	0.8	125
Personal computers (per 100 population)*	0.8	119
Broadband internet subscribers (per 100 population)	0.0	126
10th pillar: Market size		
Domestic market size index*	1.3	130
Foreign market size index*	1.6	133
11th pillar: Business sophistication		
Local supplier quantity	4.2	110
Local supplier quality	3.5	119
State of cluster development	2.4	131
Nature of competitive advantage	3.3	76
Value chain breadth	3.4	77
Control of international distribution	3.8	94
Production process sophistication	2.4	127
Extent of marketing	2.5	132
Willingness to delegate authority	2.6	130
12th pillar: Innovation		
Capacity for innovation	2.5	114
Quality of scientific research institutions	3.3	105
Company spending on R&D	2.6	109
University-industry research collaboration	2.6	110
Gov't procurement of advanced tech products	3.4	79
Availability of scientists and engineers	2.2	134
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

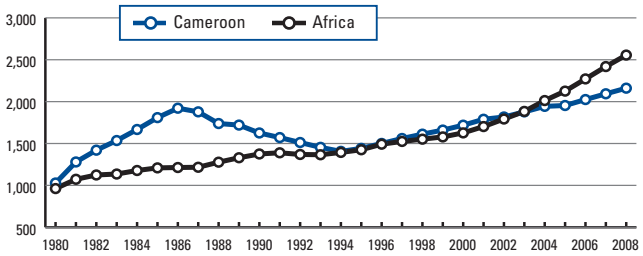
Cameroon

Key indicators

Population (millions), 2008	18.9
GDP (US$ billions), 2007	20.7
GDP (PPP) per capita (int'l $), 2007	2,093.6
Sectoral value-added (% GDP), 2007	
Agriculture	19.4
Industry	29.0
Services	51.6
Human Development Index, 2006	
Score (0–1, 1 is best)	0.51
Rank (out of 179 economies)	150

Source: UNFPA, IMF, EIU, World Bank, UNDP.

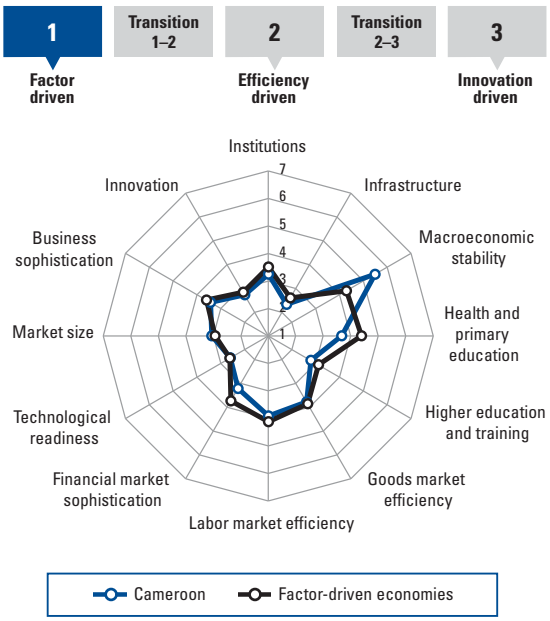
GDP (PPP) per capita (int'l $), 1980–2008



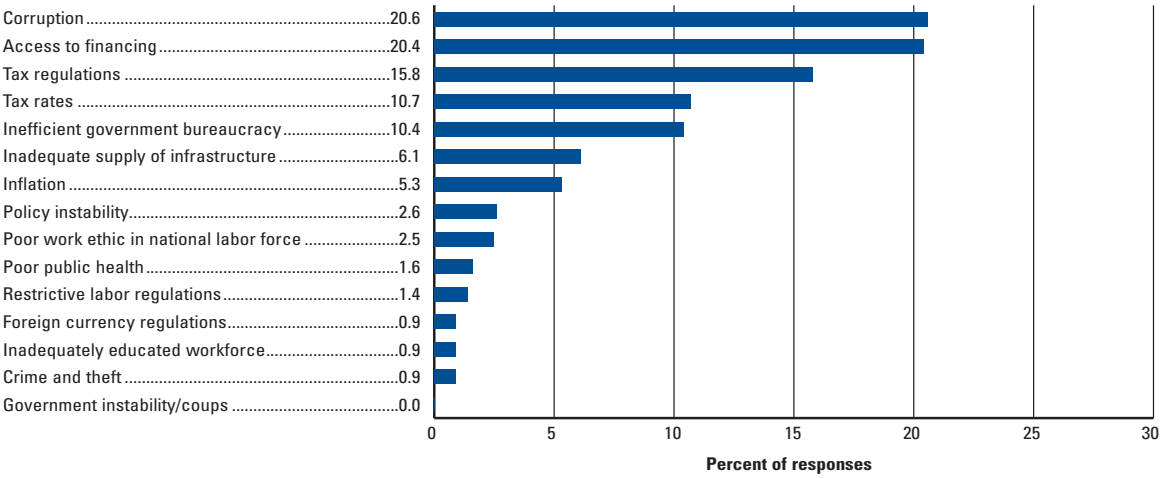
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**114**	**3.5**
GCI 2007–2008 (out of 131)	116	3.4
GCI 2006–2007 (out of 122)	109	3.4
Basic requirements	**109**	**3.7**
1st pillar: Institutions	116	3.2
2nd pillar: Infrastructure	117	2.3
3rd pillar: Macroeconomic stability	34	5.5
4th pillar: Health and primary education	125	3.7
Efficiency enhancers	**120**	**3.2**
5th pillar: Higher education and training	121	2.8
6th pillar: Goods market efficiency	108	3.8
7th pillar: Labor market efficiency	114	3.9
8th pillar: Financial market sophistication	124	3.2
9th pillar: Technological readiness	110	2.6
10th pillar: Market size	89	3.1
Innovation and sophistication factors	**108**	**3.1**
11th pillar: Business sophistication	108	3.4
12th pillar: Innovation	108	2.7

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Cameroon

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	3.7	105
Intellectual property protection	3.1	87
Diversion of public funds	1.7	133
Public trust of politicians	2.0	103
Judicial independence	2.2	126
Favoritism in decisions of government officials	2.6	101
Wastefulness of government spending	2.8	110
Burden of government regulation	2.4	122
Efficiency of legal framework	2.9	112
Transparency of government policymaking	4.2	53
Business costs of terrorism	5.7	63
Business costs of crime and violence	4.1	98
Organized crime	4.7	90
Reliability of police services	4.3	68
Ethical behavior of firms	3.2	125
Strength of auditing and reporting standards	3.6	120
Efficacy of corporate boards	4.3	105
Protection of minority shareholders' interests	4.3	84
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.4	111
Quality of roads	2.4	113
Quality of railroad infrastructure	2.2	71
Quality of port infrastructure	2.7	114
Quality of air transport infrastructure	3.0	125
Available seat kilometers per week (millions)*	35.3	100
Quality of electricity supply	2.9	111
Main telephone lines (per 100 population)*	0.8	123
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	4.5	21
National savings rate (% GDP)*	17.3	88
Inflation (%)*	0.9	9
Interest rate spread (%)*	10.8	114
Government gross debt (% GDP)*	15.4	19
4th pillar: Health and primary education		
Business impact of malaria	4.2	117
Malaria incidence (cases per 100,000 population)*	4,663.5	118
Business impact of tuberculosis	4.4	110
Tuberculosis incidence (cases per 100,000 population)*	192.0	104
Business impact of HIV/AIDS	3.8	114
HIV prevalence (% adult population)*	5.1	123
Infant mortality (deaths per 1,000 live births)*	87.0	121
Life expectancy at birth (years)*	51.0	121
Quality of primary education	3.2	87
Primary education enrollment (net rate, %)*	n/a	n/a
Education expenditure (% GNI)*	1.6	123
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	23.7	128
Tertiary education enrollment (gross rate, %)*	6.7	108
Quality of the educational system	3.2	85
Quality of math and science education	3.7	86
Quality of management schools	3.9	78
Internet access in schools	2.0	121
Local availability of research and training services	3.5	94
Extent of staff training	3.4	104

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.6	90
Extent of market dominance	3.4	85
Effectiveness of anti-monopoly policy	3.6	78
Extent and effect of taxation	2.8	116
Total tax rate (% profits)*	51.9	97
Number of procedures required to start a business*	13.0	108
Number of days required to start a business*	37.0	87
Agricultural policy costs	4.2	44
Prevalence of trade barriers	4.3	92
Trade-weighted tariff rate (% duty)*	14.1	121
Prevalence of foreign ownership	5.3	59
Business impact of rules on FDI	4.5	104
Burden of customs procedures	2.8	111
Degree of customer orientation	4.1	98
Buyer sophistication	2.8	113
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	3.9	108
Flexibility of wage determination	4.7	94
Non-wage labor costs (% worker's salary)*	16.0	65
Rigidity of Employment Index (0–100, 100 is worst)*	46.0	93
Hiring and firing practices	4.0	56
Firing costs (in weeks of wages)*	33.0	59
Pay and productivity	3.4	115
Reliance on professional management	3.6	120
Brain drain	2.6	103
Female-to-male participation ratio in labor force*	0.7	91
8th pillar: Financial market sophistication		
Financial market sophistication	1.9	134
Financing through local equity market	2.8	119
Ease of access to loans	2.1	126
Venture capital availability	2.1	123
Restriction on capital flows	3.8	106
Strength of Investor Protection (0–10, 10 is best)*	4.3	86
Soundness of banks	5.4	82
Regulation of securities exchanges	2.9	126
Strength of Legal Rights (0–10, 10 is best)*	3.0	93
9th pillar: Technological readiness		
Availability of latest technologies	4.1	86
Firm-level technology absorption	4.6	78
Laws relating to ICT	2.3	128
FDI and technology transfer	4.8	75
Mobile telephone subscribers (per 100 population)*	18.9	113
Internet users (per 100 population)*	2.2	118
Personal computers (per 100 population)*	1.2	113
Broadband internet subscribers (per 100 population)	0.0	121
10th pillar: Market size		
Domestic market size index*	2.9	81
Foreign market size index*	3.4	97
11th pillar: Business sophistication		
Local supplier quantity	4.9	56
Local supplier quality	3.9	106
State of cluster development	2.6	124
Nature of competitive advantage	2.6	128
Value chain breadth	2.7	116
Control of international distribution	3.7	99
Production process sophistication	2.6	115
Extent of marketing	3.8	91
Willingness to delegate authority	2.7	129
12th pillar: Innovation		
Capacity for innovation	2.6	110
Quality of scientific research institutions	3.1	116
Company spending on R&D	2.6	104
University-industry research collaboration	2.5	119
Gov't procurement of advanced tech products	3.2	99
Availability of scientists and engineers	3.9	87
USPTO utility patents (per million population)*	0.1	79

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Chad

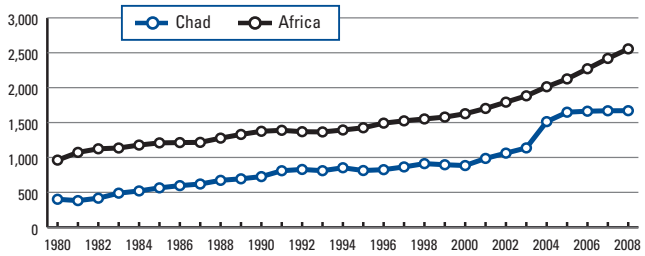
Key indicators

Population (millions), 2008 ..... 11.1
GDP (US$ billions), 2007 ..... 7.0
GDP (PPP) per capita (int'l $), 2007 ..... 1,668.7
Sectoral value-added (% GDP), 2007
- Agriculture 23.4
- Industry 44.1
- Services 32.5

Human Development Index, 2006
- Score (0–1, 1 is best) 0.39
- Rank (out of 179 economies) 170

Source: UNFPA, IMF, EIU, World Bank, UNDP.

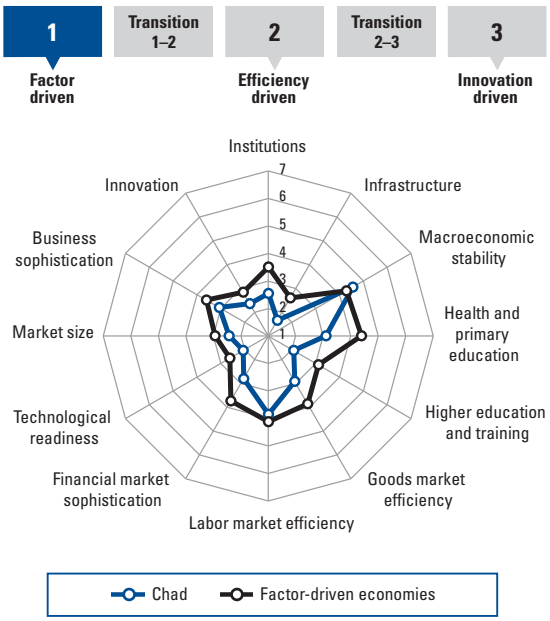
GDP (PPP) per capita (int'l $), 1980–2008



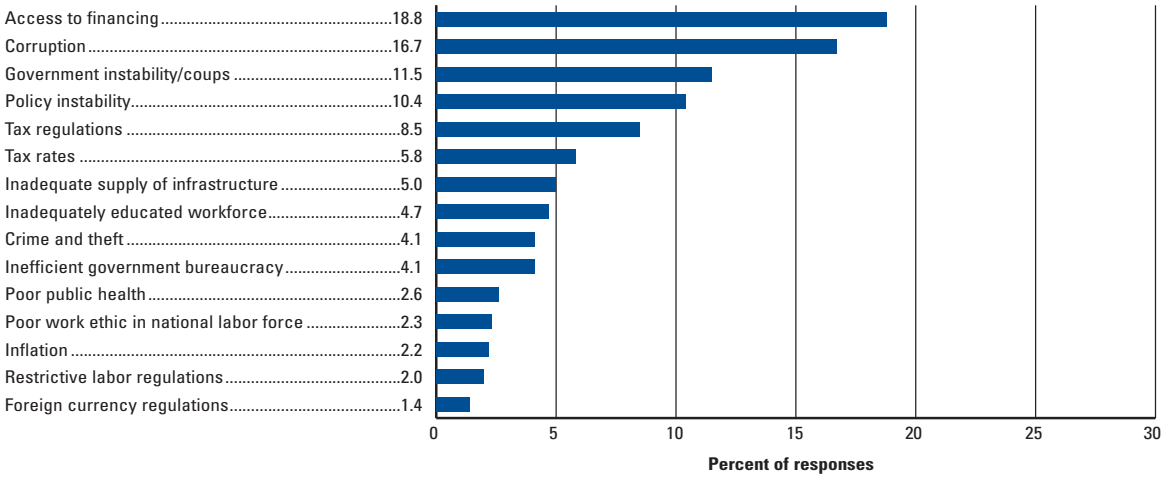
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**134**	**2.8**
GCI 2007–2008 (out of 131)	131	2.8
GCI 2006–2007 (out of 122)	121	2.8
Basic requirements	**133**	**3.0**
1st pillar: Institutions	133	2.5
2nd pillar: Infrastructure	134	1.7
3rd pillar: Macroeconomic stability	97	4.5
4th pillar: Health and primary education	134	3.1
Efficiency enhancers	**134**	**2.7**
5th pillar: Higher education and training	134	2.1
6th pillar: Goods market efficiency	134	2.9
7th pillar: Labor market efficiency	119	3.8
8th pillar: Financial market sophistication	133	2.8
9th pillar: Technological readiness	134	2.1
10th pillar: Market size	113	2.4
Innovation and sophistication factors	**131**	**2.7**
11th pillar: Business sophistication	129	3.1
12th pillar: Innovation	130	2.3

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Chad

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	2.7	130
Intellectual property protection	2.1	129
Diversion of public funds	1.6	134
Public trust of politicians	1.8	118
Judicial independence	1.8	130
Favoritism in decisions of government officials	2.0	127
Wastefulness of government spending	2.1	130
Burden of government regulation	2.8	101
Efficiency of legal framework	2.4	125
Transparency of government policymaking	3.3	116
Business costs of terrorism	4.4	122
Business costs of crime and violence	3.2	120
Organized crime	3.1	131
Reliability of police services	2.4	127
Ethical behavior of firms	2.8	133
Strength of auditing and reporting standards	2.5	133
Efficacy of corporate boards	3.2	134
Protection of minority shareholders' interests	3.6	121
2nd pillar: Infrastructure		
Quality of overall infrastructure	1.6	134
Quality of roads	1.6	132
Quality of railroad infrastructure	n/a	n/a
Quality of port infrastructure	2.7	117
Quality of air transport infrastructure	2.8	129
Available seat kilometers per week (millions)*	7.2	126
Quality of electricity supply	1.3	134
Main telephone lines (per 100 population)*	0.1	133
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	0.8	47
National savings rate (% GDP)*	10.5	123
Inflation (%)*	–8.8	1
Interest rate spread (%)*	10.8	114
Government gross debt (% GDP)*	24.1	38
4th pillar: Health and primary education		
Business impact of malaria	2.9	131
Malaria incidence (cases per 100,000 population)*	4,540.7	117
Business impact of tuberculosis	3.8	128
Tuberculosis incidence (cases per 100,000 population)*	299.0	116
Business impact of HIV/AIDS	2.9	126
HIV prevalence (% adult population)*	3.5	121
Infant mortality (deaths per 1,000 live births)*	124.0	134
Life expectancy at birth (years)*	46.0	130
Quality of primary education	2.1	130
Primary education enrollment (net rate, %)*	60.2	128
Education expenditure (% GNI)*	1.3	125
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	15.2	131
Tertiary education enrollment (gross rate, %)*	1.2	132
Quality of the educational system	2.3	128
Quality of math and science education	2.7	126
Quality of management schools	2.4	132
Internet access in schools	1.6	132
Local availability of research and training services	2.8	127
Extent of staff training	2.5	134

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	3.1	133
Extent of market dominance	2.9	120
Effectiveness of anti-monopoly policy	2.7	127
Extent and effect of taxation	2.7	118
Total tax rate (% profits)*	63.7	112
Number of procedures required to start a business*	19.0	128
Number of days required to start a business*	75.0	117
Agricultural policy costs	3.8	85
Prevalence of trade barriers	3.5	128
Trade-weighted tariff rate (% duty)*	14.7	124
Prevalence of foreign ownership	3.9	119
Business impact of rules on FDI	3.7	125
Burden of customs procedures	1.9	134
Degree of customer orientation	3.2	134
Buyer sophistication	2.2	134
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	3.4	130
Flexibility of wage determination	5.4	46
Non-wage labor costs (% worker's salary)*	21.0	89
Rigidity of Employment Index (0–100, 100 is worst)*	46.0	93
Hiring and firing practices	3.5	89
Firing costs (in weeks of wages)*	36.0	65
Pay and productivity	3.0	130
Reliance on professional management	2.5	134
Brain drain	2.4	117
Female-to-male participation ratio in labor force*	0.9	35
8th pillar: Financial market sophistication		
Financial market sophistication	2.1	132
Financing through local equity market	2.0	133
Ease of access to loans	2.0	129
Venture capital availability	1.9	133
Restriction on capital flows	2.9	130
Strength of Investor Protection (0–10, 10 is best)*	4.0	98
Soundness of banks	4.4	127
Regulation of securities exchanges	2.5	133
Strength of Legal Rights (0–10, 10 is best)*	3.0	93
9th pillar: Technological readiness		
Availability of latest technologies	2.7	133
Firm-level technology absorption	3.5	129
Laws relating to ICT	2.5	123
FDI and technology transfer	3.6	131
Mobile telephone subscribers (per 100 population)*	4.6	129
Internet users (per 100 population)*	0.6	127
Personal computers (per 100 population)*	0.2	131
Broadband internet subscribers (per 100 population)	0.0	126
10th pillar: Market size		
Domestic market size index*	2.1	121
Foreign market size index*	3.3	99
11th pillar: Business sophistication		
Local supplier quantity	4.5	85
Local supplier quality	3.2	132
State of cluster development	2.2	132
Nature of competitive advantage	3.3	80
Value chain breadth	3.3	84
Control of international distribution	3.4	117
Production process sophistication	2.0	133
Extent of marketing	2.4	133
Willingness to delegate authority	2.4	134
12th pillar: Innovation		
Capacity for innovation	2.6	108
Quality of scientific research institutions	2.7	126
Company spending on R&D	2.2	129
University-industry research collaboration	2.1	132
Gov't procurement of advanced tech products	3.2	101
Availability of scientists and engineers	2.7	129
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Côte d'Ivoire

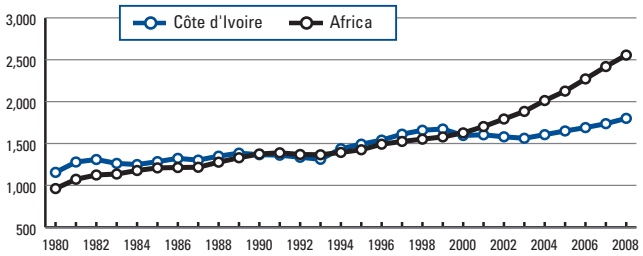
Key indicators

Population (millions), 2008 ..... 19.6
GDP (US$ billions), 2007 ..... 19.8
GDP (PPP) per capita (int'l $), 2007 ..... 1,736.8
Sectoral value-added (% GDP), 2007
- Agriculture 23.4
- Industry 26.1
- Services 50.5

Human Development Index, 2006
- Score (0–1, 1 is best) 0.43
- Rank (out of 179 economies) 166

Source: UNFPA, IMF, EIU, World Bank, UNDP.

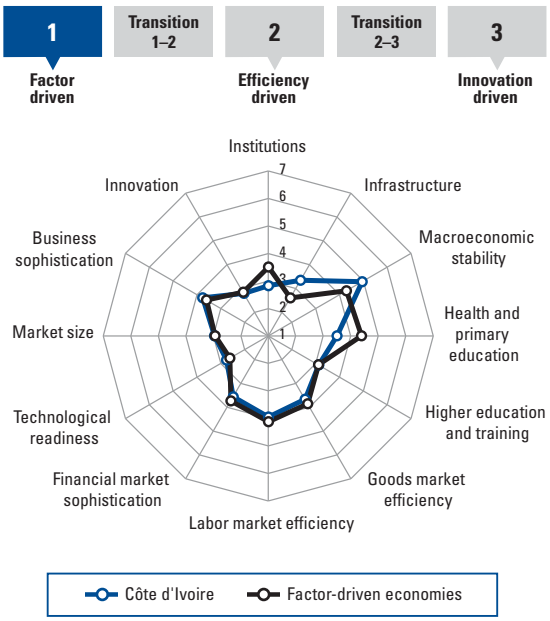
GDP (PPP) per capita (int'l $), 1980–2008



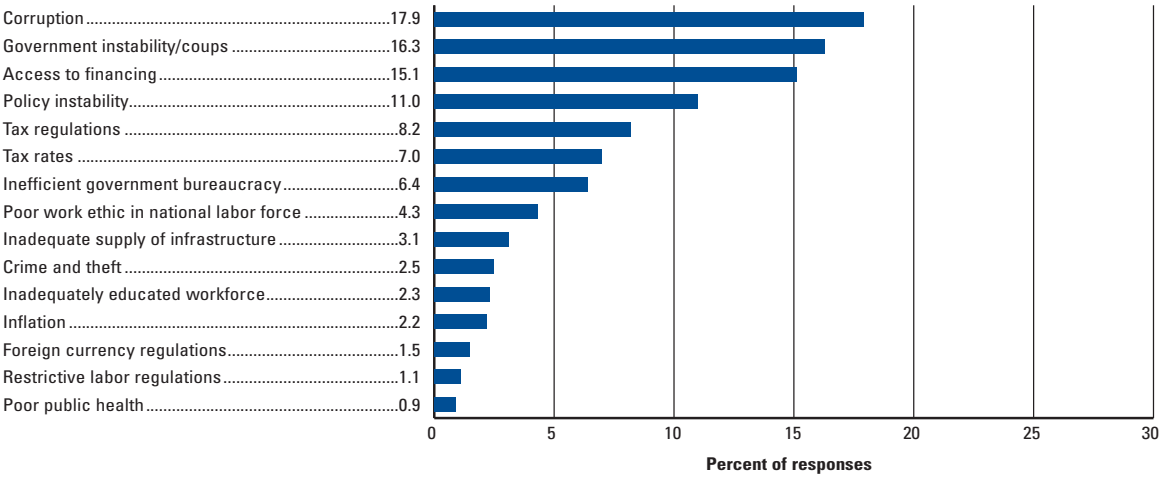
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**110**	**3.5**
GCI 2007–2008 (out of 131)	n/a	n/a
GCI 2006–2007 (out of 122)	n/a	n/a
Basic requirements	**113**	**3.6**
1st pillar: Institutions	130	2.8
2nd pillar: Infrastructure	73	3.3
3rd pillar: Macroeconomic stability	69	4.9
4th pillar: Health and primary education	127	3.5
Efficiency enhancers	**109**	**3.3**
5th pillar: Higher education and training	112	3.1
6th pillar: Goods market efficiency	117	3.7
7th pillar: Labor market efficiency	111	3.9
8th pillar: Financial market sophistication	113	3.6
9th pillar: Technological readiness	99	2.8
10th pillar: Market size	94	3.0
Innovation and sophistication factors	**94**	**3.3**
11th pillar: Business sophistication	88	3.8
12th pillar: Innovation	105	2.8

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Côte d'Ivoire

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	3.6	113
Intellectual property protection	2.1	131
Diversion of public funds	2.0	130
Public trust of politicians	1.5	129
Judicial independence	1.7	132
Favoritism in decisions of government officials	2.2	118
Wastefulness of government spending	2.3	124
Burden of government regulation	2.7	111
Efficiency of legal framework	2.0	132
Transparency of government policymaking	4.1	66
Business costs of terrorism	4.7	111
Business costs of crime and violence	2.3	129
Organized crime	2.3	133
Reliability of police services	2.7	121
Ethical behavior of firms	3.2	124
Strength of auditing and reporting standards	4.0	98
Efficacy of corporate boards	4.2	107
Protection of minority shareholders' interests	4.5	72
2nd pillar: Infrastructure		
Quality of overall infrastructure	3.5	68
Quality of roads	3.8	58
Quality of railroad infrastructure	1.9	80
Quality of port infrastructure	4.8	40
Quality of air transport infrastructure	4.3	82
Available seat kilometers per week (millions)*	31.1	103
Quality of electricity supply	4.9	63
Main telephone lines (per 100 population)*	1.4	115
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	0.3	56
National savings rate (% GDP)*	14.5	99
Inflation (%)*	2.1	23
Interest rate spread (%)*	5.8	73
Government gross debt (% GDP)*	81.1	116
4th pillar: Health and primary education		
Business impact of malaria	3.7	125
Malaria incidence (cases per 100,000 population)*	2,348.3	113
Business impact of tuberculosis	3.8	125
Tuberculosis incidence (cases per 100,000 population)*	420.0	125
Business impact of HIV/AIDS	3.2	122
HIV prevalence (% adult population)*	3.9	122
Infant mortality (deaths per 1,000 live births)*	118.0	132
Life expectancy at birth (years)*	53.0	118
Quality of primary education	3.1	90
Primary education enrollment (net rate, %)*	54.9	129
Education expenditure (% GNI)*	4.7	49
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	24.6	125
Tertiary education enrollment (gross rate, %)*	6.5	109
Quality of the educational system	2.9	106
Quality of math and science education	4.0	71
Quality of management schools	4.2	62
Internet access in schools	2.3	108
Local availability of research and training services	3.7	84
Extent of staff training	3.9	68

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.7	83
Extent of market dominance	2.6	129
Effectiveness of anti-monopoly policy	3.0	116
Extent and effect of taxation	3.2	85
Total tax rate (% profits)*	45.4	71
Number of procedures required to start a business*	10.0	75
Number of days required to start a business*	40.0	92
Agricultural policy costs	3.7	96
Prevalence of trade barriers	4.3	89
Trade-weighted tariff rate (% duty)*	10.5	103
Prevalence of foreign ownership	5.8	21
Business impact of rules on FDI	5.5	39
Burden of customs procedures	2.8	112
Degree of customer orientation	3.7	122
Buyer sophistication	2.7	118
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.3	92
Flexibility of wage determination	5.1	69
Non-wage labor costs (% worker's salary)*	18.0	75
Rigidity of Employment Index (0–100, 100 is worst)*	38.0	70
Hiring and firing practices	3.8	69
Firing costs (in weeks of wages)*	49.0	79
Pay and productivity	3.9	88
Reliance on professional management	4.3	84
Brain drain	3.3	68
Female-to-male participation ratio in labor force*	0.4	119
8th pillar: Financial market sophistication		
Financial market sophistication	3.4	97
Financing through local equity market	4.3	75
Ease of access to loans	1.4	134
Venture capital availability	1.5	134
Restriction on capital flows	3.5	115
Strength of Investor Protection (0–10, 10 is best)*	3.3	112
Soundness of banks	5.5	78
Regulation of securities exchanges	4.5	71
Strength of Legal Rights (0–10, 10 is best)*	3.0	93
9th pillar: Technological readiness		
Availability of latest technologies	4.5	73
Firm-level technology absorption	5.3	41
Laws relating to ICT	2.3	130
FDI and technology transfer	4.9	68
Mobile telephone subscribers (per 100 population)*	22.0	109
Internet users (per 100 population)*	1.6	119
Personal computers (per 100 population)*	1.8	108
Broadband internet subscribers (per 100 population)	0.1	104
10th pillar: Market size		
Domestic market size index*	2.7	95
Foreign market size index*	3.8	83
11th pillar: Business sophistication		
Local supplier quantity	4.6	82
Local supplier quality	4.6	70
State of cluster development	3.4	74
Nature of competitive advantage	2.7	120
Value chain breadth	2.9	110
Control of international distribution	3.8	87
Production process sophistication	2.7	108
Extent of marketing	4.0	84
Willingness to delegate authority	3.3	116
12th pillar: Innovation		
Capacity for innovation	2.4	122
Quality of scientific research institutions	3.3	104
Company spending on R&D	2.6	113
University-industry research collaboration	2.2	127
Gov't procurement of advanced tech products	3.4	80
Availability of scientists and engineers	4.9	27
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Egypt

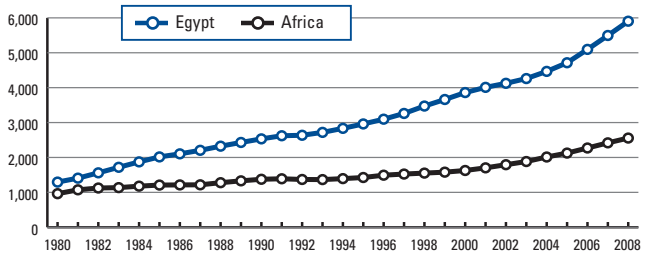
Key indicators

Population (millions), 2008 ..... 76.8
GDP (US$ billions), 2007 ..... 128.0
GDP (PPP) per capita (int'l $), 2007 ..... 5,495.1
Sectoral value-added (% GDP), 2007
- Agriculture 13.0
- Industry 35.5
- Services 51.5

Human Development Index, 2006
- Score (0–1, 1 is best) 0.72
- Rank (out of 179 economies) 116

Source: UNFPA, IMF, EIU, World Bank, UNDP.

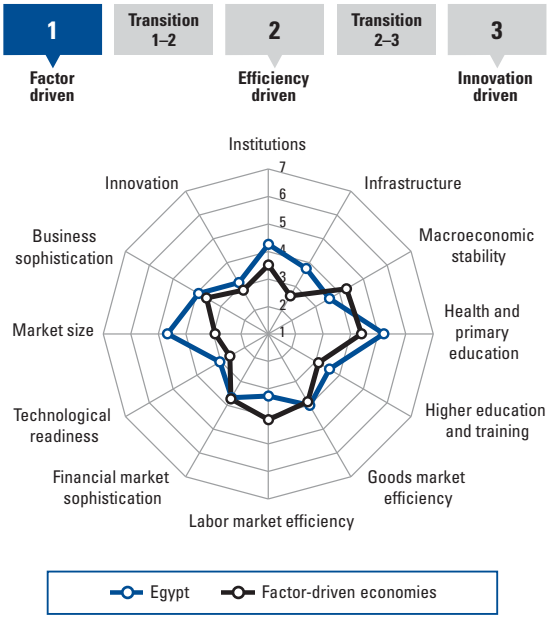
GDP (PPP) per capita (int'l $), 1980–2008



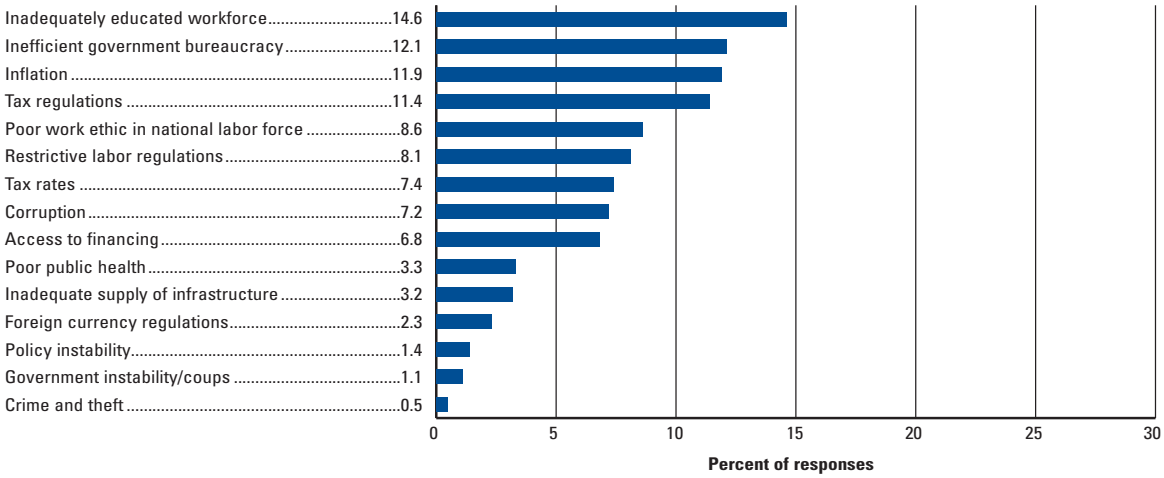
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**81**	**4.0**
GCI 2007–2008 (out of 131)	77	4.0
GCI 2006–2007 (out of 122)	71	4.0
Basic requirements	**83**	**4.2**
1st pillar: Institutions	52	4.2
2nd pillar: Infrastructure	60	3.7
3rd pillar: Macroeconomic stability	125	3.6
4th pillar: Health and primary education	88	5.2
Efficiency enhancers	**88**	**3.7**
5th pillar: Higher education and training	91	3.6
6th pillar: Goods market efficiency	87	4.0
7th pillar: Labor market efficiency	134	3.3
8th pillar: Financial market sophistication	106	3.7
9th pillar: Technological readiness	84	3.0
10th pillar: Market size	27	4.7
Innovation and sophistication factors	**74**	**3.5**
11th pillar: Business sophistication	77	3.9
12th pillar: Innovation	67	3.2

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Egypt

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	4.7	67
Intellectual property protection	3.6	60
Diversion of public funds	3.2	85
Public trust of politicians	3.1	51
Judicial independence	5.0	42
Favoritism in decisions of government officials	3.2	61
Wastefulness of government spending	3.2	86
Burden of government regulation	3.4	55
Efficiency of legal framework	3.9	55
Transparency of government policymaking	4.1	67
Business costs of terrorism	5.6	72
Business costs of crime and violence	5.8	23
Organized crime	6.3	21
Reliability of police services	4.7	52
Ethical behavior of firms	4.4	53
Strength of auditing and reporting standards	4.8	66
Efficacy of corporate boards	4.4	93
Protection of minority shareholders' interests	4.5	68
2nd pillar: Infrastructure		
Quality of overall infrastructure	3.9	57
Quality of roads	3.4	74
Quality of railroad infrastructure	3.0	54
Quality of port infrastructure	3.9	69
Quality of air transport infrastructure	5.1	52
Available seat kilometers per week (millions)*	598.0	32
Quality of electricity supply	5.2	53
Main telephone lines (per 100 population)*	14.3	79
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–5.7	126
National savings rate (% GDP)*	21.5	70
Inflation (%)*	11.0	122
Interest rate spread (%)*	6.4	81
Government gross debt (% GDP)*	105.8	124
4th pillar: Health and primary education		
Business impact of malaria	6.5	52
Malaria incidence (cases per 100,000 population)*	0.1	61
Business impact of tuberculosis	6.0	60
Tuberculosis incidence (cases per 100,000 population)*	24.0	42
Business impact of HIV/AIDS	6.0	32
HIV prevalence (% adult population)*	<0.1	1
Infant mortality (deaths per 1,000 live births)*	28.0	88
Life expectancy at birth (years)*	68.0	89
Quality of primary education	2.1	129
Primary education enrollment (net rate, %)*	93.9	63
Education expenditure (% GNI)*	4.4	59
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	87.8	65
Tertiary education enrollment (gross rate, %)*	34.7	59
Quality of the educational system	2.4	126
Quality of math and science education	2.6	128
Quality of management schools	3.2	116
Internet access in schools	2.5	99
Local availability of research and training services	3.6	92
Extent of staff training	3.5	96

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.6	92
Extent of market dominance	3.4	87
Effectiveness of anti-monopoly policy	3.3	98
Extent and effect of taxation	4.1	34
Total tax rate (% profits)*	47.9	80
Number of procedures required to start a business*	7.0	34
Number of days required to start a business*	9.0	16
Agricultural policy costs	3.6	102
Prevalence of trade barriers	3.9	118
Trade-weighted tariff rate (% duty)*	21.8	132
Prevalence of foreign ownership	5.0	78
Business impact of rules on FDI	4.9	83
Burden of customs procedures	3.5	77
Degree of customer orientation	5.2	27
Buyer sophistication	2.4	130
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.7	50
Flexibility of wage determination	5.2	62
Non-wage labor costs (% worker's salary)*	25.0	101
Rigidity of Employment Index (0–100, 100 is worst)*	27.0	40
Hiring and firing practices	3.5	92
Firing costs (in weeks of wages)*	132.0	119
Pay and productivity	3.5	114
Reliance on professional management	3.5	124
Brain drain	2.1	129
Female-to-male participation ratio in labor force*	0.3	133
8th pillar: Financial market sophistication		
Financial market sophistication	3.5	95
Financing through local equity market	4.7	49
Ease of access to loans	3.1	79
Venture capital availability	3.4	46
Restriction on capital flows	4.4	80
Strength of Investor Protection (0–10, 10 is best)*	5.0	67
Soundness of banks	4.7	111
Regulation of securities exchanges	4.3	80
Strength of Legal Rights (0–10, 10 is best)*	1.0	123
9th pillar: Technological readiness		
Availability of latest technologies	4.8	60
Firm-level technology absorption	4.8	63
Laws relating to ICT	3.9	64
FDI and technology transfer	5.1	55
Mobile telephone subscribers (per 100 population)*	23.9	106
Internet users (per 100 population)*	8.0	92
Personal computers (per 100 population)*	4.2	90
Broadband internet subscribers (per 100 population)	0.3	86
10th pillar: Market size		
Domestic market size index*	4.5	25
Foreign market size index*	5.0	39
11th pillar: Business sophistication		
Local supplier quantity	4.5	86
Local supplier quality	3.9	103
State of cluster development	3.8	46
Nature of competitive advantage	2.9	105
Value chain breadth	3.5	73
Control of international distribution	4.3	49
Production process sophistication	3.7	61
Extent of marketing	3.7	95
Willingness to delegate authority	4.6	38
12th pillar: Innovation		
Capacity for innovation	2.9	85
Quality of scientific research institutions	3.4	96
Company spending on R&D	3.3	57
University-industry research collaboration	3.0	79
Gov't procurement of advanced tech products	3.7	57
Availability of scientists and engineers	4.5	47
USPTO utility patents (per million population)*	0.2	70

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Ethiopia

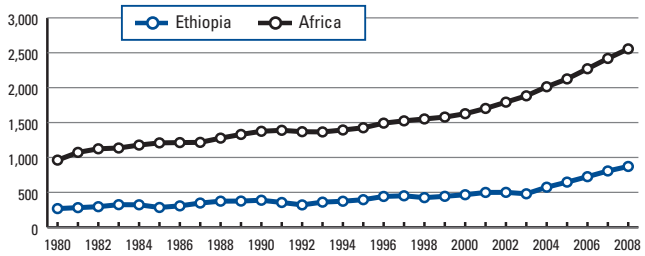
Key indicators

Population (millions), 2008 ..... 85.2
GDP (US$ billions), 2007 ..... 19.4
GDP (PPP) per capita (int'l $), 2007 ..... 806.6
Sectoral value-added (% GDP), 2007
- Agriculture 46.3
- Industry 13.4
- Services 40.3

Human Development Index, 2006
- Score (0–1, 1 is best) 0.39
- Rank (out of 179 economies) 169

Source: UNFPA, IMF, EIU, World Bank, UNDP.

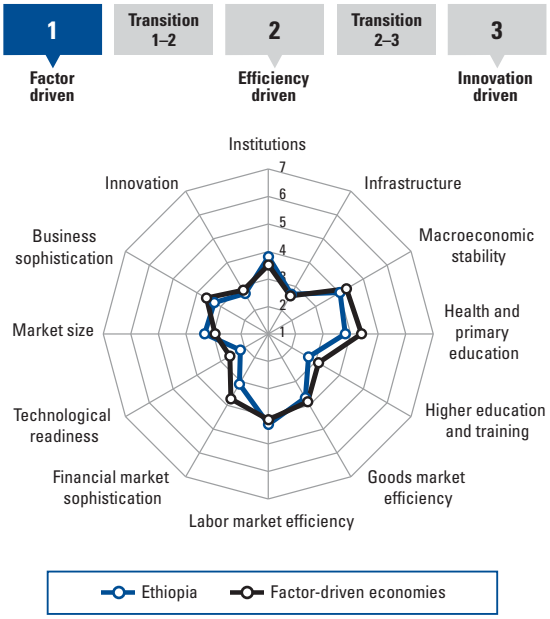
GDP (PPP) per capita (int'l $), 1980–2008



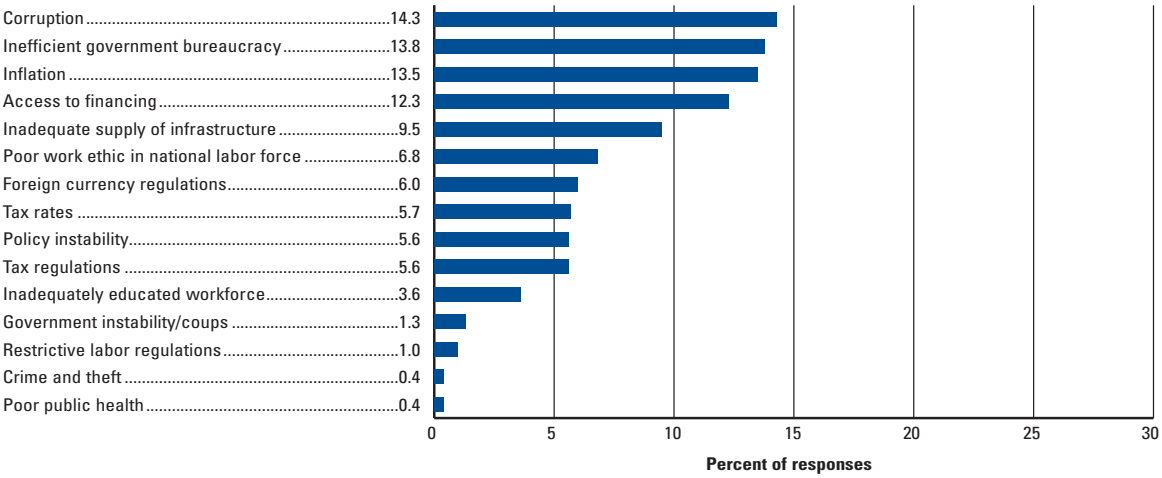
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**121**	**3.4**
GCI 2007–2008 (out of 131)	123	3.3
GCI 2006–2007 (out of 122)	116	3.3
Basic requirements	**119**	**3.6**
1st pillar: Institutions	77	3.8
2nd pillar: Infrastructure	103	2.7
3rd pillar: Macroeconomic stability	119	4.0
4th pillar: Health and primary education	123	3.8
Efficiency enhancers	**121**	**3.2**
5th pillar: Higher education and training	126	2.7
6th pillar: Goods market efficiency	116	3.7
7th pillar: Labor market efficiency	74	4.3
8th pillar: Financial market sophistication	127	3.1
9th pillar: Technological readiness	132	2.2
10th pillar: Market size	76	3.3
Innovation and sophistication factors	**114**	**3.0**
11th pillar: Business sophistication	122	3.3
12th pillar: Innovation	109	2.7

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Ethiopia

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	4.3	78
Intellectual property protection	3.3	81
Diversion of public funds	3.4	71
Public trust of politicians	2.7	67
Judicial independence	3.2	98
Favoritism in decisions of government officials	3.1	66
Wastefulness of government spending	3.7	46
Burden of government regulation	3.8	26
Efficiency of legal framework	3.4	77
Transparency of government policymaking	3.8	92
Business costs of terrorism	5.3	91
Business costs of crime and violence	5.1	54
Organized crime	5.6	53
Reliability of police services	4.0	82
Ethical behavior of firms	3.8	86
Strength of auditing and reporting standards	3.7	114
Efficacy of corporate boards	4.1	113
Protection of minority shareholders' interests	4.2	86
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.6	101
Quality of roads	2.8	92
Quality of railroad infrastructure	1.6	99
Quality of port infrastructure	3.6	80
Quality of air transport infrastructure	4.8	60
Available seat kilometers per week (millions)*	116.4	74
Quality of electricity supply	3.9	91
Main telephone lines (per 100 population)*	0.9	119
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–3.1	106
National savings rate (% GDP)*	17.2	89
Inflation (%)*	17.0	131
Interest rate spread (%)*	4.5	57
Government gross debt (% GDP)*	43.2	78
4th pillar: Health and primary education		
Business impact of malaria	4.1	118
Malaria incidence (cases per 100,000 population)*	808.0	110
Business impact of tuberculosis	3.9	123
Tuberculosis incidence (cases per 100,000 population)*	378.0	123
Business impact of HIV/AIDS	3.0	124
HIV prevalence (% adult population)*	2.1	117
Infant mortality (deaths per 1,000 live births)*	109.0	130
Life expectancy at birth (years)*	56.0	116
Quality of primary education	2.8	105
Primary education enrollment (net rate, %)*	65.2	123
Education expenditure (% GNI)*	4.0	75
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	30.5	119
Tertiary education enrollment (gross rate, %)*	2.7	125
Quality of the educational system	3.2	88
Quality of math and science education	3.2	104
Quality of management schools	3.2	115
Internet access in schools	2.1	118
Local availability of research and training services	3.1	114
Extent of staff training	2.8	127

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	3.8	126
Extent of market dominance	2.8	121
Effectiveness of anti-monopoly policy	3.1	112
Extent and effect of taxation	3.7	54
Total tax rate (% profits)*	31.1	20
Number of procedures required to start a business*	7.0	34
Number of days required to start a business*	16.0	33
Agricultural policy costs	3.9	71
Prevalence of trade barriers	3.8	119
Trade-weighted tariff rate (% duty)*	12.4	113
Prevalence of foreign ownership	3.7	124
Business impact of rules on FDI	4.6	98
Burden of customs procedures	3.3	97
Degree of customer orientation	3.8	118
Buyer sophistication	2.6	125
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	3.6	124
Flexibility of wage determination	5.1	74
Non-wage labor costs (% worker's salary)*	0.0	1
Rigidity of Employment Index (0–100, 100 is worst)*	34.0	57
Hiring and firing practices	3.9	62
Firing costs (in weeks of wages)*	40.0	74
Pay and productivity	3.2	126
Reliance on professional management	3.6	116
Brain drain	2.5	111
Female-to-male participation ratio in labor force*	0.8	52
8th pillar: Financial market sophistication		
Financial market sophistication	2.3	127
Financing through local equity market	2.6	124
Ease of access to loans	2.2	124
Venture capital availability	2.2	117
Restriction on capital flows	3.0	129
Strength of Investor Protection (0–10, 10 is best)*	4.3	86
Soundness of banks	4.2	128
Regulation of securities exchanges	3.1	122
Strength of Legal Rights (0–10, 10 is best)*	4.0	72
9th pillar: Technological readiness		
Availability of latest technologies	3.1	127
Firm-level technology absorption	3.6	127
Laws relating to ICT	2.7	120
FDI and technology transfer	4.0	119
Mobile telephone subscribers (per 100 population)*	1.1	134
Internet users (per 100 population)*	0.3	133
Personal computers (per 100 population)*	0.5	123
Broadband internet subscribers (per 100 population)	0.0	125
10th pillar: Market size		
Domestic market size index*	3.4	67
Foreign market size index*	3.2	104
11th pillar: Business sophistication		
Local supplier quantity	3.7	124
Local supplier quality	3.5	124
State of cluster development	3.1	90
Nature of competitive advantage	2.8	115
Value chain breadth	2.8	114
Control of international distribution	4.2	62
Production process sophistication	2.3	128
Extent of marketing	2.8	128
Willingness to delegate authority	3.6	98
12th pillar: Innovation		
Capacity for innovation	2.6	106
Quality of scientific research institutions	3.3	102
Company spending on R&D	2.3	128
University-industry research collaboration	2.7	105
Gov't procurement of advanced tech products	3.5	71
Availability of scientists and engineers	3.1	122
USPTO utility patents (per million population)*	0.0	85

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Gambia, The

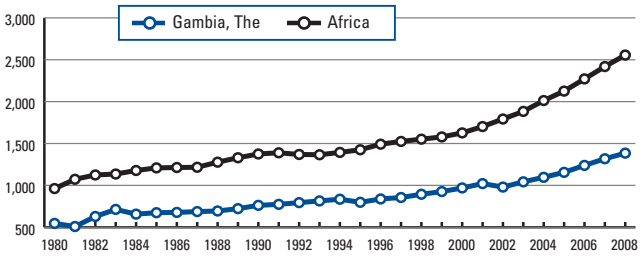
Key indicators

Population (millions), 2008 ..... 1.8
GDP (US$ billions), 2007 ..... 0.6
GDP (PPP) per capita (int'l $), 2007 ..... 1,317.7
Sectoral value-added (% GDP), 2005
- Agriculture 32.6
- Industry 13.1
- Services 54.2

Human Development Index, 2006
- Score (0–1, 1 is best) 0.47
- Rank (out of 179 economies) 160

Source: UNFPA, IMF, EIU, World Bank, UNDP.

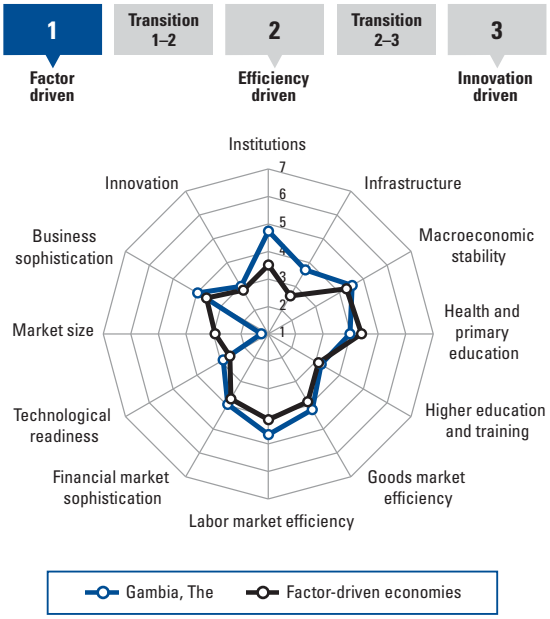
GDP (PPP) per capita (int'l $), 1980–2008



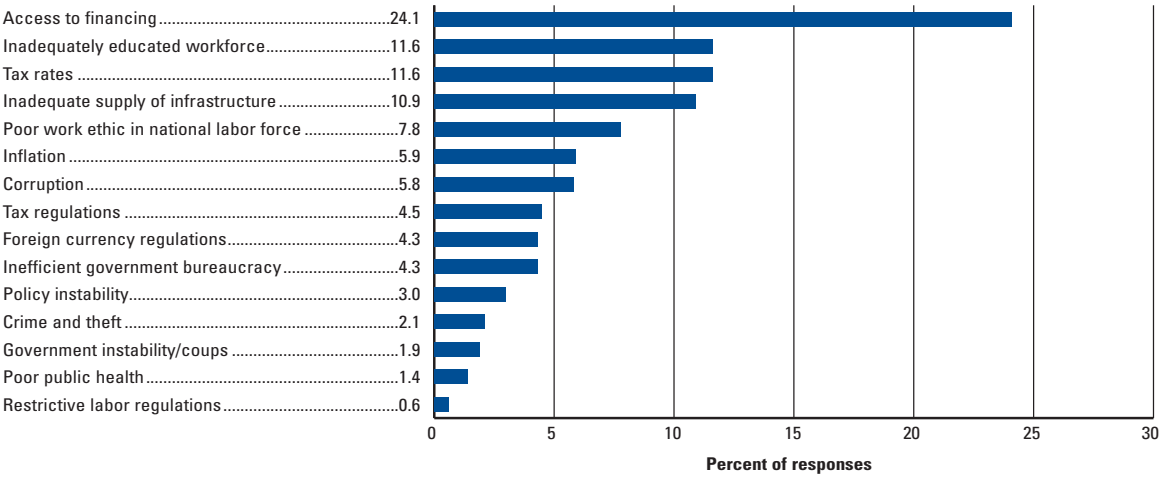
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**87**	**3.9**
GCI 2007–2008 (out of 131)	102	3.6
GCI 2006–2007 (out of 122)	102	3.5
Basic requirements	**81**	**4.2**
1st pillar: Institutions	38	4.7
2nd pillar: Infrastructure	62	3.7
3rd pillar: Macroeconomic stability	99	4.5
4th pillar: Health and primary education	119	4.0
Efficiency enhancers	**107**	**3.4**
5th pillar: Higher education and training	105	3.2
6th pillar: Goods market efficiency	68	4.2
7th pillar: Labor market efficiency	38	4.7
8th pillar: Financial market sophistication	87	4.0
9th pillar: Technological readiness	91	2.9
10th pillar: Market size	132	1.3
Innovation and sophistication factors	**78**	**3.5**
11th pillar: Business sophistication	74	4.0
12th pillar: Innovation	81	3.0

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Gambia, The

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	4.9	56
Intellectual property protection	4.0	49
Diversion of public funds	4.4	42
Public trust of politicians	4.0	27
Judicial independence	4.7	46
Favoritism in decisions of government officials	4.2	27
Wastefulness of government spending	4.7	14
Burden of government regulation	4.7	4
Efficiency of legal framework	4.5	40
Transparency of government policymaking	5.0	24
Business costs of terrorism	6.1	42
Business costs of crime and violence	5.7	33
Organized crime	5.9	37
Reliability of police services	5.1	38
Ethical behavior of firms	4.5	49
Strength of auditing and reporting standards	4.7	70
Efficacy of corporate boards	5.1	34
Protection of minority shareholders' interests	5.0	43
2nd pillar: Infrastructure		
Quality of overall infrastructure	4.1	52
Quality of roads	3.9	56
Quality of railroad infrastructure	n/a	n/a
Quality of port infrastructure	4.1	62
Quality of air transport infrastructure	4.6	71
Available seat kilometers per week (millions)*	5.5	129
Quality of electricity supply	4.4	76
Main telephone lines (per 100 population)*	3.0	109
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	1.8	36
National savings rate (% GDP)*	17.0	90
Inflation (%)*	5.0	65
Interest rate spread (%)*	15.0	124
Government gross debt (% GDP)*	49.9	88
4th pillar: Health and primary education		
Business impact of malaria	4.0	120
Malaria incidence (cases per 100,000 population)*	10,030.7	122
Business impact of tuberculosis	4.8	100
Tuberculosis incidence (cases per 100,000 population)*	257.0	112
Business impact of HIV/AIDS	4.7	92
HIV prevalence (% adult population)*	0.9	100
Infant mortality (deaths per 1,000 live births)*	97.0	124
Life expectancy at birth (years)*	59.0	111
Quality of primary education	4.1	52
Primary education enrollment (net rate, %)*	61.8	126
Education expenditure (% GNI)*	2.0	116
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	44.9	111
Tertiary education enrollment (gross rate, %)*	1.1	133
Quality of the educational system	4.4	34
Quality of math and science education	3.4	95
Quality of management schools	4.1	66
Internet access in schools	2.7	94
Local availability of research and training services	3.5	93
Extent of staff training	4.1	53

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.7	85
Extent of market dominance	4.3	45
Effectiveness of anti-monopoly policy	4.5	39
Extent and effect of taxation	4.1	35
Total tax rate (% profits)*	286.7	128
Number of procedures required to start a business*	9.0	58
Number of days required to start a business*	32.0	75
Agricultural policy costs	4.6	18
Prevalence of trade barriers	4.7	66
Trade-weighted tariff rate (% duty)*	16.2	129
Prevalence of foreign ownership	6.0	15
Business impact of rules on FDI	5.9	13
Burden of customs procedures	4.6	31
Degree of customer orientation	4.7	66
Buyer sophistication	3.0	101
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	5.3	15
Flexibility of wage determination	5.8	19
Non-wage labor costs (% worker's salary)*	11.0	35
Rigidity of Employment Index (0–100, 100 is worst)*	23.0	29
Hiring and firing practices	4.7	22
Firing costs (in weeks of wages)*	9.0	15
Pay and productivity	4.6	35
Reliance on professional management	5.3	32
Brain drain	2.9	87
Female-to-male participation ratio in labor force*	0.7	82
8th pillar: Financial market sophistication		
Financial market sophistication	3.8	81
Financing through local equity market	3.2	109
Ease of access to loans	3.1	78
Venture capital availability	2.8	80
Restriction on capital flows	5.2	50
Strength of Investor Protection (0–10, 10 is best)*	2.7	123
Soundness of banks	5.8	53
Regulation of securities exchanges	4.1	90
Strength of Legal Rights (0–10, 10 is best)*	4.0	72
9th pillar: Technological readiness		
Availability of latest technologies	4.4	74
Firm-level technology absorption	4.7	67
Laws relating to ICT	3.6	75
FDI and technology transfer	4.9	65
Mobile telephone subscribers (per 100 population)*	26.0	101
Internet users (per 100 population)*	5.3	105
Personal computers (per 100 population)*	2.0	104
Broadband internet subscribers (per 100 population)	0.0	118
10th pillar: Market size		
Domestic market size index*	1.0	133
Foreign market size index*	2.0	131
11th pillar: Business sophistication		
Local supplier quantity	4.5	88
Local supplier quality	4.5	74
State of cluster development	3.6	57
Nature of competitive advantage	3.4	73
Value chain breadth	3.4	83
Control of international distribution	4.2	59
Production process sophistication	2.9	102
Extent of marketing	3.4	107
Willingness to delegate authority	4.4	45
12th pillar: Innovation		
Capacity for innovation	2.9	82
Quality of scientific research institutions	3.8	71
Company spending on R&D	2.6	112
University-industry research collaboration	2.9	87
Gov't procurement of advanced tech products	4.0	39
Availability of scientists and engineers	3.2	119
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Ghana

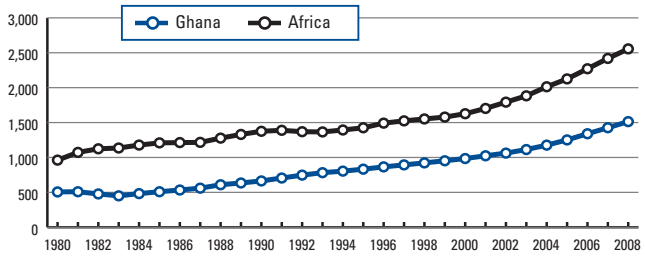
Key indicators

Population (millions), 2008 ..... 23.9
GDP (US$ billions), 2007 ..... 15.2
GDP (PPP) per capita (int'l $), 2007 ..... 1,426.0
Sectoral value-added (% GDP), 2007
- Agriculture 36.3
- Industry 25.3
- Services 38.4

Human Development Index, 2006
- Score (0–1, 1 is best) 0.53
- Rank (out of 179 economies) 142

Source: UNFPA, IMF, EIU, World Bank, UNDP.

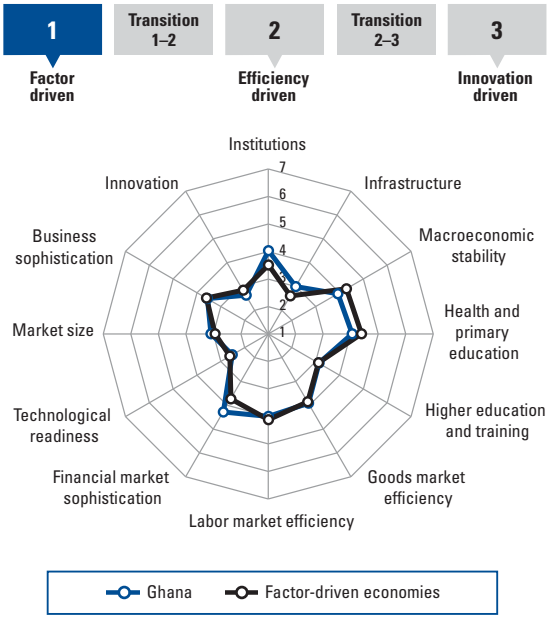
GDP (PPP) per capita (int'l $), 1980–2008



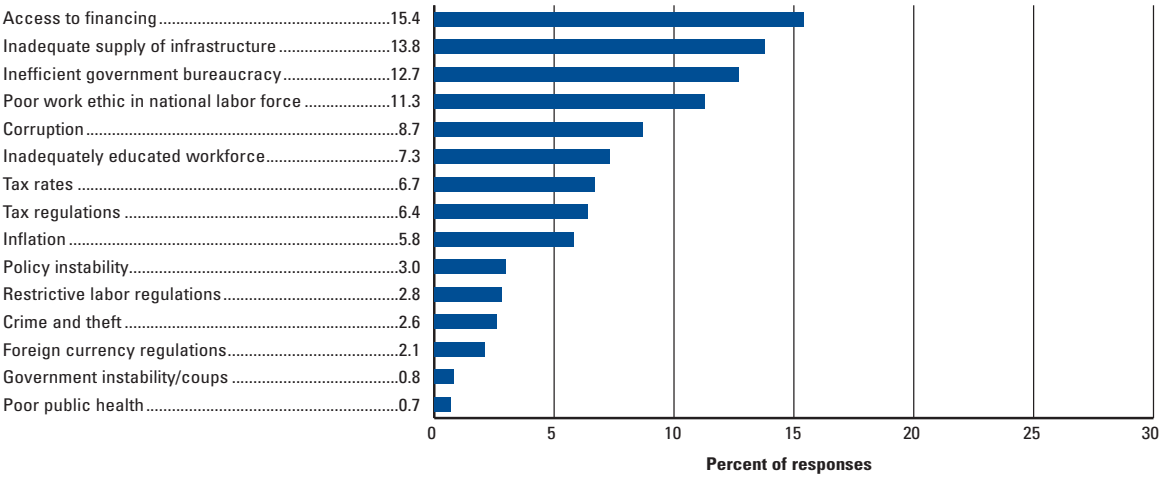
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**102**	**3.6**
GCI 2007–2008 (out of 131)	n/a	n/a
GCI 2006–2007 (out of 122)	n/a	n/a
Basic requirements	**106**	**3.7**
1st pillar: Institutions	63	4.0
2nd pillar: Infrastructure	82	3.0
3rd pillar: Macroeconomic stability	121	3.9
4th pillar: Health and primary education	115	4.0
Efficiency enhancers	**95**	**3.5**
5th pillar: Higher education and training	111	3.1
6th pillar: Goods market efficiency	97	3.9
7th pillar: Labor market efficiency	108	4.0
8th pillar: Financial market sophistication	69	4.3
9th pillar: Technological readiness	115	2.5
10th pillar: Market size	86	3.1
Innovation and sophistication factors	**107**	**3.1**
11th pillar: Business sophistication	98	3.6
12th pillar: Innovation	114	2.6

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Ghana

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	4.4	74
Intellectual property protection	3.3	80
Diversion of public funds	3.0	93
Public trust of politicians	3.1	52
Judicial independence	3.8	70
Favoritism in decisions of government officials	2.5	107
Wastefulness of government spending	3.4	66
Burden of government regulation	3.2	70
Efficiency of legal framework	4.3	44
Transparency of government policymaking	3.9	84
Business costs of terrorism	6.4	18
Business costs of crime and violence	4.9	63
Organized crime	5.7	45
Reliability of police services	3.8	89
Ethical behavior of firms	4.1	63
Strength of auditing and reporting standards	4.6	72
Efficacy of corporate boards	5.1	37
Protection of minority shareholders' interests	5.4	23
2nd pillar: Infrastructure		
Quality of overall infrastructure	3.4	74
Quality of roads	3.4	73
Quality of railroad infrastructure	1.3	111
Quality of port infrastructure	3.5	86
Quality of air transport infrastructure	4.1	91
Available seat kilometers per week (millions)*	71.4	82
Quality of electricity supply	3.2	103
Main telephone lines (per 100 population)*	1.6	114
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–8.2	131
National savings rate (% GDP)*	20.1	77
Inflation (%)*	9.6	114
Interest rate spread (%)*	6.3	78
Government gross debt (% GDP)*	39.6	69
4th pillar: Health and primary education		
Business impact of malaria	3.2	128
Malaria incidence (cases per 100,000 population)*	16,399.5	127
Business impact of tuberculosis	4.4	112
Tuberculosis incidence (cases per 100,000 population)*	203.0	106
Business impact of HIV/AIDS	4.0	111
HIV prevalence (% adult population)*	1.9	115
Infant mortality (deaths per 1,000 live births)*	68.0	110
Life expectancy at birth (years)*	57.0	115
Quality of primary education	3.2	83
Primary education enrollment (net rate, %)*	63.6	124
Education expenditure (% GNI)*	4.7	47
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	49.3	109
Tertiary education enrollment (gross rate, %)*	5.8	111
Quality of the educational system	3.4	75
Quality of math and science education	3.2	105
Quality of management schools	3.9	76
Internet access in schools	2.3	109
Local availability of research and training services	3.4	101
Extent of staff training	3.4	103

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	5.1	61
Extent of market dominance	3.9	58
Effectiveness of anti-monopoly policy	2.9	122
Extent and effect of taxation	3.7	51
Total tax rate (% profits)*	32.9	28
Number of procedures required to start a business*	11.0	91
Number of days required to start a business*	42.0	94
Agricultural policy costs	3.8	78
Prevalence of trade barriers	5.7	14
Trade-weighted tariff rate (% duty)*	10.5	104
Prevalence of foreign ownership	5.7	29
Business impact of rules on FDI	5.6	35
Burden of customs procedures	3.4	90
Degree of customer orientation	3.9	116
Buyer sophistication	2.6	124
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.2	98
Flexibility of wage determination	4.4	105
Non-wage labor costs (% worker's salary)*	13.0	46
Rigidity of Employment Index (0–100, 100 is worst)*	37.0	65
Hiring and firing practices	3.5	93
Firing costs (in weeks of wages)*	178.0	124
Pay and productivity	3.2	127
Reliance on professional management	5.0	45
Brain drain	2.2	125
Female-to-male participation ratio in labor force*	0.9	9
8th pillar: Financial market sophistication		
Financial market sophistication	3.8	82
Financing through local equity market	4.8	44
Ease of access to loans	2.4	116
Venture capital availability	2.2	119
Restriction on capital flows	4.2	88
Strength of Investor Protection (0–10, 10 is best)*	6.0	26
Soundness of banks	5.8	59
Regulation of securities exchanges	4.9	57
Strength of Legal Rights (0–10, 10 is best)*	5.0	52
9th pillar: Technological readiness		
Availability of latest technologies	3.9	101
Firm-level technology absorption	4.1	107
Laws relating to ICT	2.8	113
FDI and technology transfer	4.2	104
Mobile telephone subscribers (per 100 population)*	23.1	108
Internet users (per 100 population)*	2.7	116
Personal computers (per 100 population)*	0.6	121
Broadband internet subscribers (per 100 population)	0.1	103
10th pillar: Market size		
Domestic market size index*	2.9	82
Foreign market size index*	3.6	93
11th pillar: Business sophistication		
Local supplier quantity	4.3	105
Local supplier quality	3.9	104
State of cluster development	3.0	101
Nature of competitive advantage	3.1	88
Value chain breadth	2.7	121
Control of international distribution	3.5	114
Production process sophistication	2.0	132
Extent of marketing	3.7	94
Willingness to delegate authority	4.5	42
12th pillar: Innovation		
Capacity for innovation	2.2	130
Quality of scientific research institutions	3.8	70
Company spending on R&D	2.1	134
University-industry research collaboration	2.4	121
Gov't procurement of advanced tech products	2.9	115
Availability of scientists and engineers	3.6	99
USPTO utility patents (per million population)*	0.0	81

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

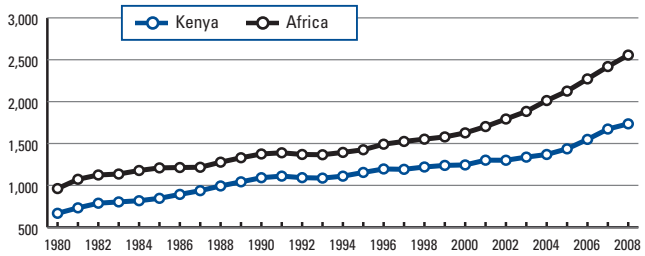
Kenya

Key indicators

Population (millions), 2008	38.6
GDP (US$ billions), 2007	27.0
GDP (PPP) per capita (int'l $), 2007	1,672.6
Sectoral value-added (% GDP), 2007	
Agriculture	22.7
Industry	19.0
Services	58.2
Human Development Index, 2006	
Score (0–1, 1 is best)	0.53
Rank (out of 179 economies)	144

Source: UNFPA, IMF, EIU, World Bank, UNDP.

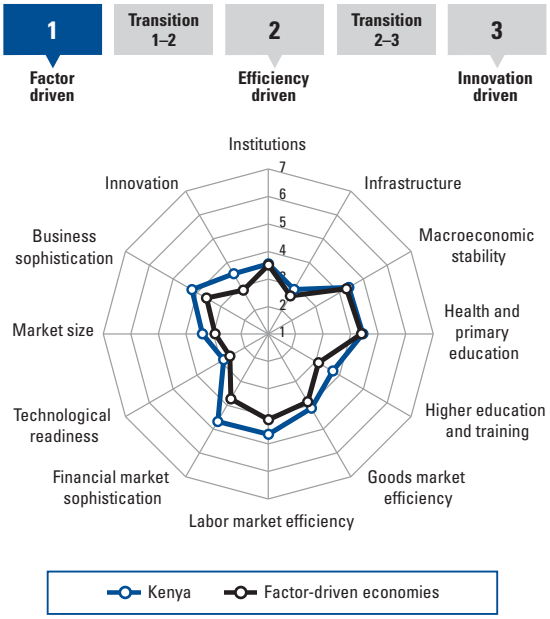
GDP (PPP) per capita (int'l $), 1980–2008



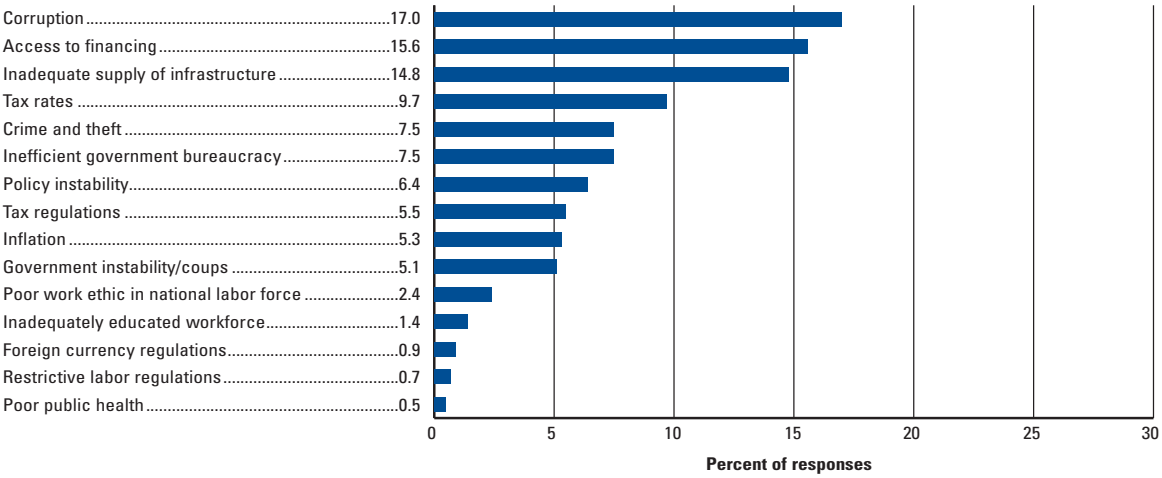
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**93**	**3.8**
GCI 2007–2008 (out of 131)	99	3.6
GCI 2006–2007 (out of 122)	88	3.7
Basic requirements	**104**	**3.8**
1st pillar: Institutions	93	3.5
2nd pillar: Infrastructure	91	2.9
3rd pillar: Macroeconomic stability	107	4.4
4th pillar: Health and primary education	108	4.4
Efficiency enhancers	**76**	**3.9**
5th pillar: Higher education and training	86	3.7
6th pillar: Goods market efficiency	74	4.1
7th pillar: Labor market efficiency	40	4.6
8th pillar: Financial market sophistication	44	4.7
9th pillar: Technological readiness	93	2.9
10th pillar: Market size	71	3.4
Innovation and sophistication factors	**50**	**3.9**
11th pillar: Business sophistication	63	4.2
12th pillar: Innovation	42	3.5

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Kenya

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	4.2	81
Intellectual property protection	3.1	92
Diversion of public funds	3.0	96
Public trust of politicians	2.1	96
Judicial independence	3.0	105
Favoritism in decisions of government officials	2.4	115
Wastefulness of government spending	3.8	42
Burden of government regulation	3.3	60
Efficiency of legal framework	3.2	84
Transparency of government policymaking	4.1	68
Business costs of terrorism	4.0	129
Business costs of crime and violence	2.9	126
Organized crime	4.0	118
Reliability of police services	3.8	88
Ethical behavior of firms	4.1	65
Strength of auditing and reporting standards	4.5	76
Efficacy of corporate boards	4.8	60
Protection of minority shareholders' interests	4.5	71
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.9	88
Quality of roads	2.8	95
Quality of railroad infrastructure	2.3	68
Quality of port infrastructure	3.5	83
Quality of air transport infrastructure	4.7	68
Available seat kilometers per week (millions)*	212.5	56
Quality of electricity supply	3.7	94
Main telephone lines (per 100 population)*	0.8	121
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–1.7	83
National savings rate (% GDP)*	16.7	94
Inflation (%)*	9.8	115
Interest rate spread (%)*	8.2	103
Government gross debt (% GDP)*	40.5	72
4th pillar: Health and primary education		
Business impact of malaria	4.3	116
Malaria incidence (cases per 100,000 population)*	387.6	107
Business impact of tuberculosis	4.3	113
Tuberculosis incidence (cases per 100,000 population)*	384.0	124
Business impact of HIV/AIDS	3.5	120
HIV prevalence (% adult population)*	6.1	125
Infant mortality (deaths per 1,000 live births)*	78.0	115
Life expectancy at birth (years)*	53.0	118
Quality of primary education	3.7	67
Primary education enrollment (net rate, %)*	75.5	116
Education expenditure (% GNI)*	6.3	17
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	50.3	108
Tertiary education enrollment (gross rate, %)*	2.7	126
Quality of the educational system	4.4	33
Quality of math and science education	4.1	65
Quality of management schools	4.3	55
Internet access in schools	2.2	114
Local availability of research and training services	4.5	36
Extent of staff training	4.2	47

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.9	71
Extent of market dominance	3.6	77
Effectiveness of anti-monopoly policy	3.9	62
Extent and effect of taxation	2.8	111
Total tax rate (% profits)*	50.9	91
Number of procedures required to start a business*	12.0	103
Number of days required to start a business*	44.0	99
Agricultural policy costs	4.4	28
Prevalence of trade barriers	3.7	120
Trade-weighted tariff rate (% duty)*	7.6	80
Prevalence of foreign ownership	5.4	57
Business impact of rules on FDI	5.0	79
Burden of customs procedures	3.1	100
Degree of customer orientation	5.1	33
Buyer sophistication	3.1	96
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.3	85
Flexibility of wage determination	5.1	70
Non-wage labor costs (% worker's salary)*	4.0	14
Rigidity of Employment Index (0–100, 100 is worst)*	21.0	27
Hiring and firing practices	4.7	21
Firing costs (in weeks of wages)*	47.0	78
Pay and productivity	4.5	48
Reliance on professional management	4.9	56
Brain drain	3.0	82
Female-to-male participation ratio in labor force*	0.8	57
8th pillar: Financial market sophistication		
Financial market sophistication	4.3	64
Financing through local equity market	5.1	25
Ease of access to loans	4.1	36
Venture capital availability	3.1	61
Restriction on capital flows	4.4	81
Strength of Investor Protection (0–10, 10 is best)*	5.0	67
Soundness of banks	5.7	64
Regulation of securities exchanges	4.1	92
Strength of Legal Rights (0–10, 10 is best)*	8.0	8
9th pillar: Technological readiness		
Availability of latest technologies	4.2	84
Firm-level technology absorption	4.7	66
Laws relating to ICT	3.4	81
FDI and technology transfer	5.2	35
Mobile telephone subscribers (per 100 population)*	20.9	111
Internet users (per 100 population)*	7.9	94
Personal computers (per 100 population)*	1.4	110
Broadband internet subscribers (per 100 population)	0.1	106
10th pillar: Market size		
Domestic market size index*	3.3	69
Foreign market size index*	3.7	90
11th pillar: Business sophistication		
Local supplier quantity	5.2	34
Local supplier quality	4.6	66
State of cluster development	3.8	47
Nature of competitive advantage	3.5	65
Value chain breadth	3.6	69
Control of international distribution	4.2	56
Production process sophistication	2.9	101
Extent of marketing	4.4	71
Willingness to delegate authority	4.2	56
12th pillar: Innovation		
Capacity for innovation	3.5	44
Quality of scientific research institutions	4.7	32
Company spending on R&D	3.7	37
University-industry research collaboration	3.7	40
Gov't procurement of advanced tech products	3.7	56
Availability of scientists and engineers	4.6	42
USPTO utility patents (per million population)*	0.0	83

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Lesotho

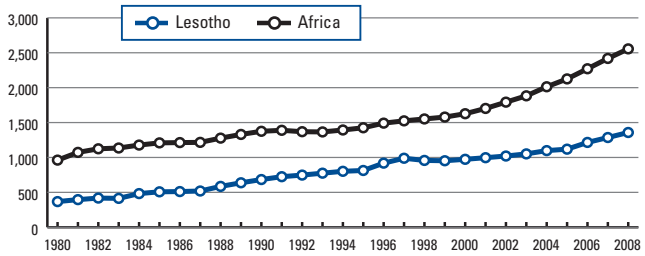
Key indicators

Population (millions), 2008 ..... 2.0
GDP (US$ billions), 2007 ..... 1.6
GDP (PPP) per capita (int'l $), 2007 ..... 1,285.6
Sectoral value-added (% GDP), 2007
- Agriculture 11.9
- Industry 46.9
- Services 41.2

Human Development Index, 2006
- Score (0–1, 1 is best) 0.50
- Rank (out of 179 economies) 155

Source: UNFPA, IMF, EIU, World Bank, UNDP.

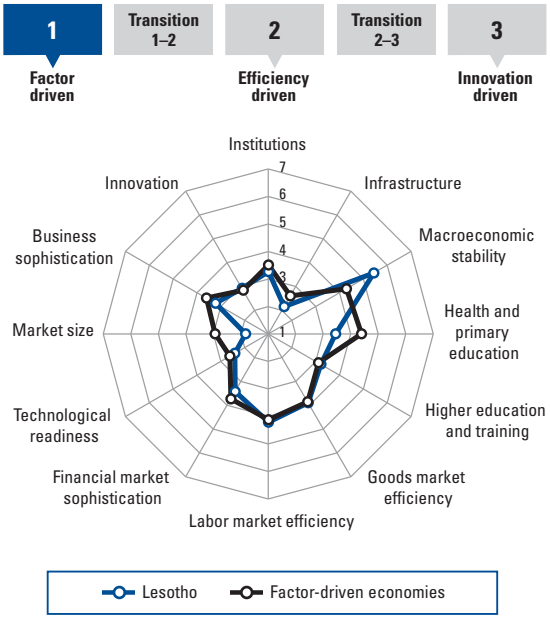
GDP (PPP) per capita (int'l $), 1980–2008



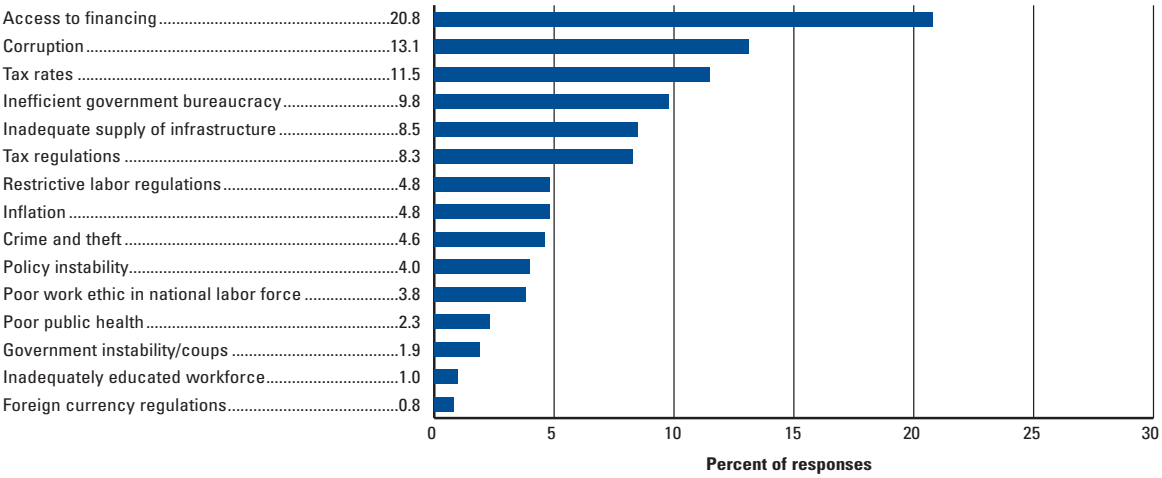
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**123**	**3.4**
GCI 2007–2008 (out of 131)	124	3.3
GCI 2006–2007 (out of 122)	101	3.5
Basic requirements	**118**	**3.6**
1st pillar: Institutions	114	3.3
2nd pillar: Infrastructure	125	2.1
3rd pillar: Macroeconomic stability	39	5.4
4th pillar: Health and primary education	129	3.4
Efficiency enhancers	**125**	**3.2**
5th pillar: Higher education and training	106	3.2
6th pillar: Goods market efficiency	102	3.9
7th pillar: Labor market efficiency	84	4.2
8th pillar: Financial market sophistication	118	3.4
9th pillar: Technological readiness	125	2.4
10th pillar: Market size	128	1.8
Innovation and sophistication factors	**110**	**3.1**
11th pillar: Business sophistication	126	3.2
12th pillar: Innovation	97	2.9

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Lesotho

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	3.4	120
Intellectual property protection	3.2	86
Diversion of public funds	2.9	101
Public trust of politicians	2.5	73
Judicial independence	3.2	95
Favoritism in decisions of government officials	2.8	92
Wastefulness of government spending	2.8	107
Burden of government regulation	3.1	73
Efficiency of legal framework	2.9	105
Transparency of government policymaking	3.6	105
Business costs of terrorism	4.6	119
Business costs of crime and violence	3.6	114
Organized crime	4.2	112
Reliability of police services	3.4	101
Ethical behavior of firms	3.3	123
Strength of auditing and reporting standards	3.4	127
Efficacy of corporate boards	3.9	125
Protection of minority shareholders' interests	3.5	125
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.2	122
Quality of roads	2.0	124
Quality of railroad infrastructure	1.9	81
Quality of port infrastructure	2.6	122
Quality of air transport infrastructure	2.3	133
Available seat kilometers per week (millions)*	0.3	133
Quality of electricity supply	3.5	97
Main telephone lines (per 100 population)*	3.0	110
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	7.7	11
National savings rate (% GDP)*	49.2	7
Inflation (%)*	8.0	99
Interest rate spread (%)*	7.7	98
Government gross debt (% GDP)*	49.4	87
4th pillar: Health and primary education		
Business impact of malaria	6.4	58
Malaria incidence (cases per 100,000 population)*	0.0	1
Business impact of tuberculosis	4.0	120
Tuberculosis incidence (cases per 100,000 population)*	635.0	132
Business impact of HIV/AIDS	2.1	134
HIV prevalence (% adult population)*	23.2	133
Infant mortality (deaths per 1,000 live births)*	102.0	128
Life expectancy at birth (years)*	42.0	134
Quality of primary education	2.6	115
Primary education enrollment (net rate, %)*	72.4	119
Education expenditure (% GNI)*	9.3	1
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	37.0	116
Tertiary education enrollment (gross rate, %)*	3.6	120
Quality of the educational system	3.3	79
Quality of math and science education	3.2	106
Quality of management schools	3.3	112
Internet access in schools	2.3	106
Local availability of research and training services	3.2	109
Extent of staff training	3.8	75

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.0	120
Extent of market dominance	3.6	76
Effectiveness of anti-monopoly policy	3.2	104
Extent and effect of taxation	3.0	102
Total tax rate (% profits)*	20.8	6
Number of procedures required to start a business*	8.0	44
Number of days required to start a business*	73.0	115
Agricultural policy costs	3.1	131
Prevalence of trade barriers	3.6	125
Trade-weighted tariff rate (% duty)*	4.2	51
Prevalence of foreign ownership	4.9	81
Business impact of rules on FDI	4.6	100
Burden of customs procedures	3.5	80
Degree of customer orientation	3.6	125
Buyer sophistication	3.2	89
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.0	104
Flexibility of wage determination	4.2	112
Non-wage labor costs (% worker's salary)*	0.0	1
Rigidity of Employment Index (0–100, 100 is worst)*	24.0	32
Hiring and firing practices	3.9	64
Firing costs (in weeks of wages)*	44.0	76
Pay and productivity	3.6	107
Reliance on professional management	3.8	109
Brain drain	2.7	98
Female-to-male participation ratio in labor force*	0.7	97
8th pillar: Financial market sophistication		
Financial market sophistication	2.9	110
Financing through local equity market	2.6	125
Ease of access to loans	2.9	92
Venture capital availability	2.6	91
Restriction on capital flows	3.9	101
Strength of Investor Protection (0–10, 10 is best)*	3.7	107
Soundness of banks	4.1	132
Regulation of securities exchanges	3.4	116
Strength of Legal Rights (0–10, 10 is best)*	5.0	52
9th pillar: Technological readiness		
Availability of latest technologies	3.6	111
Firm-level technology absorption	3.8	118
Laws relating to ICT	3.1	98
FDI and technology transfer	3.7	126
Mobile telephone subscribers (per 100 population)*	20.0	112
Internet users (per 100 population)*	3.4	114
Personal computers (per 100 population)*	0.3	129
Broadband internet subscribers (per 100 population)	0.0	122
10th pillar: Market size		
Domestic market size index*	1.6	126
Foreign market size index*	2.4	128
11th pillar: Business sophistication		
Local supplier quantity	3.3	134
Local supplier quality	3.3	127
State of cluster development	3.0	98
Nature of competitive advantage	3.4	74
Value chain breadth	3.0	103
Control of international distribution	2.9	133
Production process sophistication	3.0	97
Extent of marketing	3.0	122
Willingness to delegate authority	3.9	80
12th pillar: Innovation		
Capacity for innovation	3.0	69
Quality of scientific research institutions	3.0	117
Company spending on R&D	3.3	56
University-industry research collaboration	2.8	98
Gov't procurement of advanced tech products	3.4	81
Availability of scientists and engineers	3.6	96
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Libya

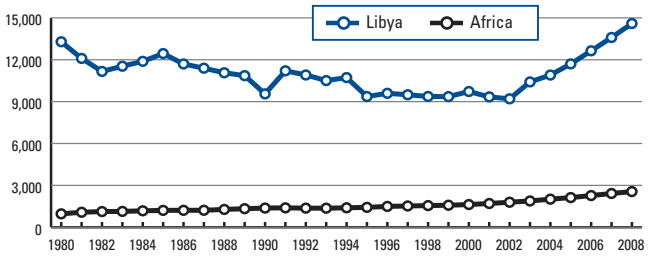
Key indicators

Population (millions), 2008 ..... 6.3
GDP (US$ billions), 2007 ..... 69.9
GDP (PPP) per capita (int'l $), 2007 ..... 13,593.3
Sectoral value-added (% GDP)
- Agriculture ..... n/a
- Industry ..... n/a
- Services ..... n/a

Human Development Index, 2006
- Score (0–1, 1 is best) 0.84
- Rank (out of 179 economies) 52

Source: UNFPA, IMF, EIU, World Bank, UNDP.

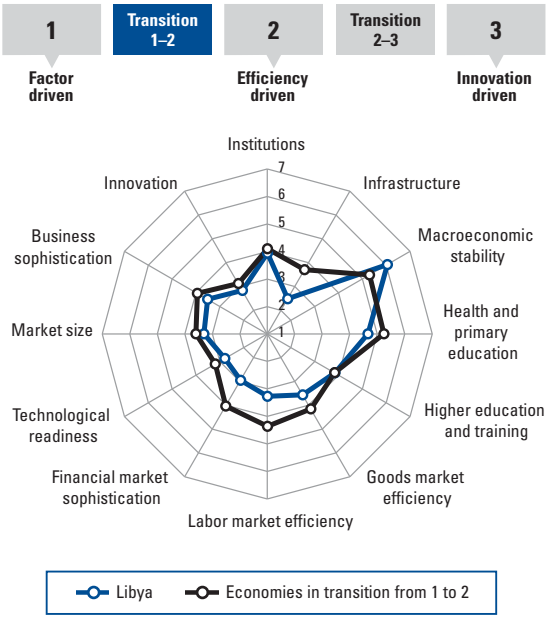
GDP (PPP) per capita (int'l $), 1980–2008



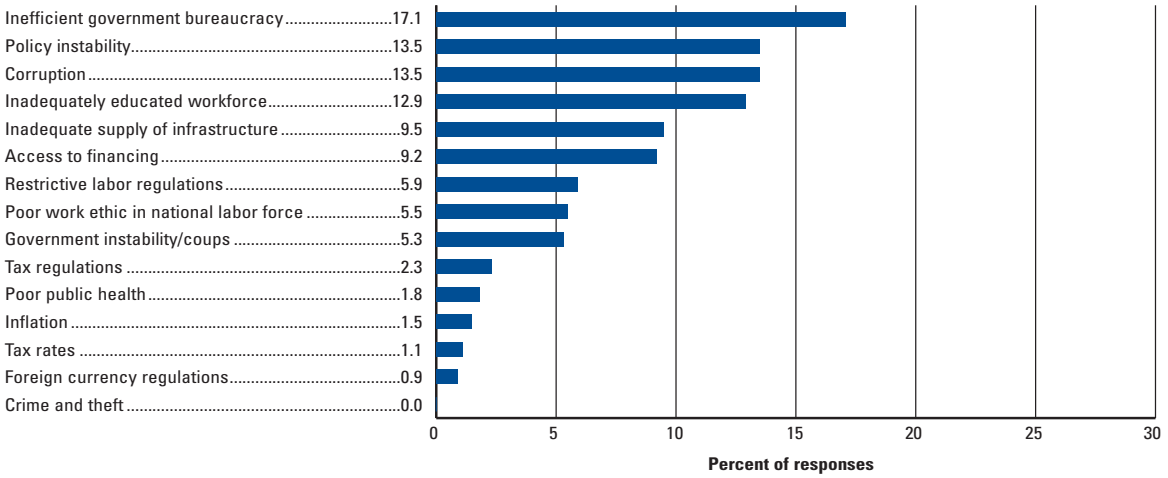
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**91**	**3.9**
GCI 2007–2008 (out of 131)	88	3.9
GCI 2006–2007 (out of 122)	n/a	n/a
Basic requirements	**75**	**4.3**
1st pillar: Institutions	65	3.9
2nd pillar: Infrastructure	112	2.5
3rd pillar: Macroeconomic stability	6	6.0
4th pillar: Health and primary education	103	4.6
Efficiency enhancers	**114**	**3.3**
5th pillar: Higher education and training	75	3.8
6th pillar: Goods market efficiency	121	3.6
7th pillar: Labor market efficiency	133	3.3
8th pillar: Financial market sophistication	131	3.0
9th pillar: Technological readiness	98	2.8
10th pillar: Market size	77	3.3
Innovation and sophistication factors	**102**	**3.2**
11th pillar: Business sophistication	101	3.5
12th pillar: Innovation	100	2.8

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Libya

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	3.8	103
Intellectual property protection	3.1	88
Diversion of public funds	3.6	58
Public trust of politicians	2.8	63
Judicial independence	4.2	59
Favoritism in decisions of government officials	3.1	68
Wastefulness of government spending	3.4	69
Burden of government regulation	3.0	86
Efficiency of legal framework	3.7	61
Transparency of government policymaking	3.6	100
Business costs of terrorism	6.5	16
Business costs of crime and violence	6.4	6
Organized crime	6.6	9
Reliability of police services	3.7	94
Ethical behavior of firms	4.1	62
Strength of auditing and reporting standards	3.5	124
Efficacy of corporate boards	3.6	131
Protection of minority shareholders' interests	4.3	78
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.4	115
Quality of roads	3.0	85
Quality of railroad infrastructure	1.1	116
Quality of port infrastructure	2.8	110
Quality of air transport infrastructure	2.9	126
Available seat kilometers per week (millions)*	87.6	77
Quality of electricity supply	4.6	71
Main telephone lines (per 100 population)*	14.6	78
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	40.2	2
National savings rate (% GDP)*	43.9	12
Inflation (%)*	6.7	82
Interest rate spread (%)*	3.5	36
Government gross debt (% GDP)*	4.7	8
4th pillar: Health and primary education		
Business impact of malaria	6.0	72
Malaria incidence (cases per 100,000 population)*	0.0	1
Business impact of tuberculosis	5.8	66
Tuberculosis incidence (cases per 100,000 population)*	18.0	35
Business impact of HIV/AIDS	5.0	80
HIV prevalence (% adult population)*	0.3	68
Infant mortality (deaths per 1,000 live births)*	18.0	70
Life expectancy at birth (years)*	72.0	66
Quality of primary education	2.8	100
Primary education enrollment (net rate, %)*	n/a	n/a
Education expenditure (% GNI)*	n/a	n/a
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	93.5	49
Tertiary education enrollment (gross rate, %)*	55.8	32
Quality of the educational system	2.6	121
Quality of math and science education	3.6	90
Quality of management schools	2.6	130
Internet access in schools	2.0	126
Local availability of research and training services	3.2	106
Extent of staff training	3.3	114

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.0	121
Extent of market dominance	3.5	80
Effectiveness of anti-monopoly policy	3.7	72
Extent and effect of taxation	4.0	37
Total tax rate (% profits)*	n/a	n/a
Number of procedures required to start a business*	n/a	n/a
Number of days required to start a business*	n/a	n/a
Agricultural policy costs	3.6	103
Prevalence of trade barriers	4.4	82
Trade-weighted tariff rate (% duty)*	0.0	1
Prevalence of foreign ownership	3.2	134
Business impact of rules on FDI	4.4	109
Burden of customs procedures	3.3	93
Degree of customer orientation	3.7	123
Buyer sophistication	2.6	123
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.4	78
Flexibility of wage determination	3.8	120
Non-wage labor costs (% worker's salary)*	n/a	n/a
Rigidity of Employment Index (0–100, 100 is worst)*	n/a	n/a
Hiring and firing practices	2.7	121
Firing costs (in weeks of wages)*	n/a	n/a
Pay and productivity	2.6	133
Reliance on professional management	3.5	122
Brain drain	3.1	73
Female-to-male participation ratio in labor force*	0.4	121
8th pillar: Financial market sophistication		
Financial market sophistication	2.1	133
Financing through local equity market	2.2	131
Ease of access to loans	3.0	83
Venture capital availability	2.3	115
Restriction on capital flows	3.1	126
Strength of Investor Protection (0–10, 10 is best)*	n/a	n/a
Soundness of banks	4.0	133
Regulation of securities exchanges	2.7	129
Strength of Legal Rights (0–10, 10 is best)*	n/a	n/a
9th pillar: Technological readiness		
Availability of latest technologies	4.1	85
Firm-level technology absorption	4.3	97
Laws relating to ICT	2.4	126
FDI and technology transfer	4.2	105
Mobile telephone subscribers (per 100 population)*	65.8	68
Internet users (per 100 population)*	4.4	111
Personal computers (per 100 population)*	2.2	101
Broadband internet subscribers (per 100 population)	0.2	95
10th pillar: Market size		
Domestic market size index*	2.9	84
Foreign market size index*	4.5	58
11th pillar: Business sophistication		
Local supplier quantity	4.6	81
Local supplier quality	4.1	91
State of cluster development	3.1	93
Nature of competitive advantage	2.6	129
Value chain breadth	2.3	130
Control of international distribution	3.8	95
Production process sophistication	3.2	82
Extent of marketing	2.9	126
Willingness to delegate authority	3.3	110
12th pillar: Innovation		
Capacity for innovation	2.2	131
Quality of scientific research institutions	3.6	82
Company spending on R&D	2.4	124
University-industry research collaboration	2.5	114
Gov't procurement of advanced tech products	3.3	96
Availability of scientists and engineers	4.6	44
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Madagascar

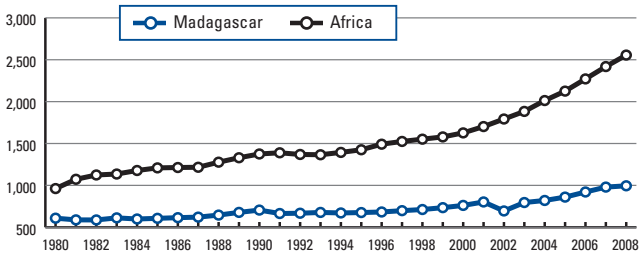
Key indicators

Population (millions), 2008 ..... 20.2
GDP (US$ billions), 2007 ..... 7.7
GDP (PPP) per capita (int'l $), 2007 ..... 979.4
Sectoral value-added (% GDP), 2007
- Agriculture 26.5
- Industry 15.0
- Services 58.4

Human Development Index, 2006
- Score (0–1, 1 is best) 0.53
- Rank (out of 179 economies) 143

Source: UNFPA, IMF, EIU, World Bank, UNDP.

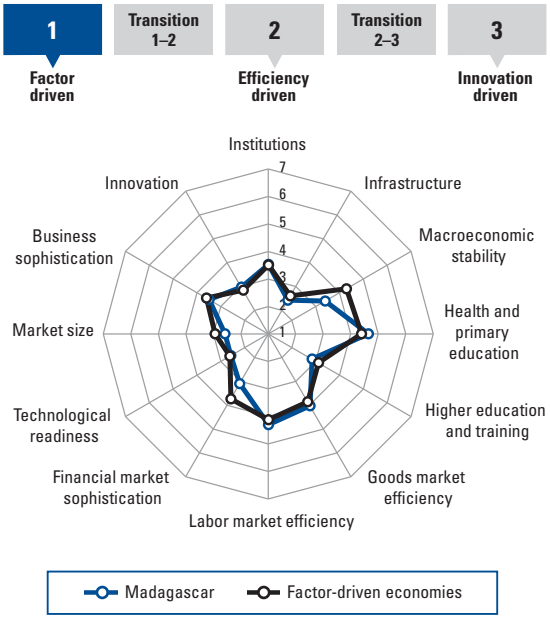
GDP (PPP) per capita (int'l $), 1980–2008



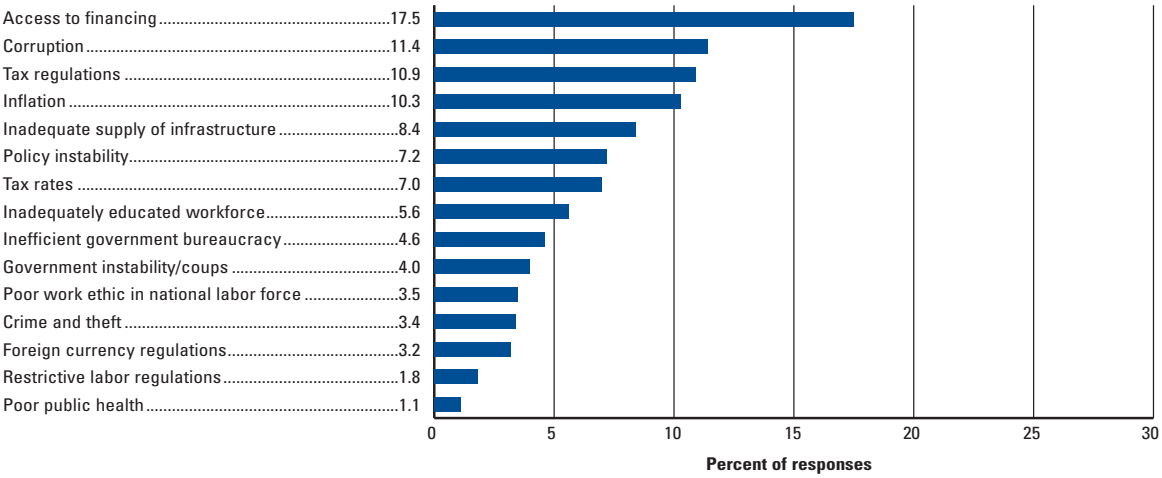
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**125**	**3.4**
GCI 2007–2008 (out of 131)	118	3.4
GCI 2006–2007 (out of 122)	111	3.3
Basic requirements	**125**	**3.5**
1st pillar: Institutions	94	3.5
2nd pillar: Infrastructure	114	2.4
3rd pillar: Macroeconomic stability	127	3.4
4th pillar: Health and primary education	104	4.6
Efficiency enhancers	**119**	**3.2**
5th pillar: Higher education and training	119	2.8
6th pillar: Goods market efficiency	85	4.0
7th pillar: Labor market efficiency	72	4.3
8th pillar: Financial market sophistication	128	3.1
9th pillar: Technological readiness	111	2.6
10th pillar: Market size	109	2.6
Innovation and sophistication factors	**97**	**3.2**
11th pillar: Business sophistication	102	3.5
12th pillar: Innovation	87	3.0

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Madagascar

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	3.6	107
Intellectual property protection	3.0	95
Diversion of public funds	3.1	91
Public trust of politicians	2.1	90
Judicial independence	3.0	107
Favoritism in decisions of government officials	3.1	69
Wastefulness of government spending	3.8	43
Burden of government regulation	2.9	92
Efficiency of legal framework	3.0	93
Transparency of government policymaking	4.0	73
Business costs of terrorism	5.0	105
Business costs of crime and violence	3.8	109
Organized crime	4.2	107
Reliability of police services	4.2	73
Ethical behavior of firms	3.8	90
Strength of auditing and reporting standards	3.8	104
Efficacy of corporate boards	4.6	83
Protection of minority shareholders' interests	4.2	91
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.6	104
Quality of roads	2.9	88
Quality of railroad infrastructure	1.7	94
Quality of port infrastructure	2.6	118
Quality of air transport infrastructure	4.3	80
Available seat kilometers per week (millions)*	42.2	96
Quality of electricity supply	2.0	123
Main telephone lines (per 100 population)*	0.7	126
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–3.5	112
National savings rate (% GDP)*	14.0	103
Inflation (%)*	10.3	118
Interest rate spread (%)*	28.5	130
Government gross debt (% GDP)*	35.9	64
4th pillar: Health and primary education		
Business impact of malaria	3.7	123
Malaria incidence (cases per 100,000 population)*	11,673.6	125
Business impact of tuberculosis	4.3	115
Tuberculosis incidence (cases per 100,000 population)*	248.0	110
Business impact of HIV/AIDS	4.1	107
HIV prevalence (% adult population)*	0.1	23
Infant mortality (deaths per 1,000 live births)*	74.0	111
Life expectancy at birth (years)*	59.0	111
Quality of primary education	2.9	99
Primary education enrollment (net rate, %)*	95.9	46
Education expenditure (% GNI)*	2.7	105
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	23.8	126
Tertiary education enrollment (gross rate, %)*	2.8	124
Quality of the educational system	2.9	103
Quality of math and science education	3.9	74
Quality of management schools	4.0	69
Internet access in schools	2.2	115
Local availability of research and training services	3.4	98
Extent of staff training	3.5	97

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.5	100
Extent of market dominance	3.1	108
Effectiveness of anti-monopoly policy	3.6	81
Extent and effect of taxation	3.5	70
Total tax rate (% profits)*	46.5	75
Number of procedures required to start a business*	5.0	9
Number of days required to start a business*	7.0	9
Agricultural policy costs	3.9	68
Prevalence of trade barriers	4.2	99
Trade-weighted tariff rate (% duty)*	8.4	89
Prevalence of foreign ownership	4.8	91
Business impact of rules on FDI	4.5	103
Burden of customs procedures	3.1	101
Degree of customer orientation	4.7	61
Buyer sophistication	2.7	120
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.3	86
Flexibility of wage determination	5.0	77
Non-wage labor costs (% worker's salary)*	18.0	75
Rigidity of Employment Index (0–100, 100 is worst)*	63.0	121
Hiring and firing practices	4.1	52
Firing costs (in weeks of wages)*	30.0	51
Pay and productivity	3.9	89
Reliance on professional management	4.5	75
Brain drain	2.5	115
Female-to-male participation ratio in labor force*	0.9	14
8th pillar: Financial market sophistication		
Financial market sophistication	2.4	125
Financing through local equity market	2.3	130
Ease of access to loans	2.5	111
Venture capital availability	2.5	105
Restriction on capital flows	3.4	118
Strength of Investor Protection (0–10, 10 is best)*	5.7	39
Soundness of banks	5.5	76
Regulation of securities exchanges	2.7	131
Strength of Legal Rights (0–10, 10 is best)*	1.0	123
9th pillar: Technological readiness		
Availability of latest technologies	4.3	78
Firm-level technology absorption	4.7	71
Laws relating to ICT	2.9	108
FDI and technology transfer	4.5	96
Mobile telephone subscribers (per 100 population)*	5.5	127
Internet users (per 100 population)*	0.6	129
Personal computers (per 100 population)*	0.5	124
Broadband internet subscribers (per 100 population)	0.5	83
10th pillar: Market size		
Domestic market size index*	2.5	105
Foreign market size index*	2.9	112
11th pillar: Business sophistication		
Local supplier quantity	4.4	104
Local supplier quality	3.9	102
State of cluster development	2.9	103
Nature of competitive advantage	2.7	121
Value chain breadth	3.1	101
Control of international distribution	3.5	110
Production process sophistication	2.6	116
Extent of marketing	3.9	87
Willingness to delegate authority	2.9	124
12th pillar: Innovation		
Capacity for innovation	2.8	88
Quality of scientific research institutions	3.0	118
Company spending on R&D	3.0	77
University-industry research collaboration	2.6	111
Gov't procurement of advanced tech products	4.1	28
Availability of scientists and engineers	4.2	63
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Malawi

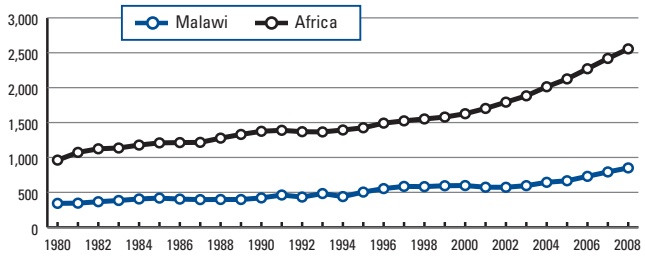
Key indicators

Population (millions), 2008 ..... 14.3
GDP (US$ billions), 2007 ..... 3.6
GDP (PPP) per capita (int'l $), 2007 ..... 792.6
Sectoral value-added (% GDP), 2007
- Agriculture 34.3
- Industry 20.4
- Services 45.3

Human Development Index, 2006
- Score (0–1, 1 is best) 0.46
- Rank (out of 179 economies) 162

Source: UNFPA, IMF, EIU, World Bank, UNDP.

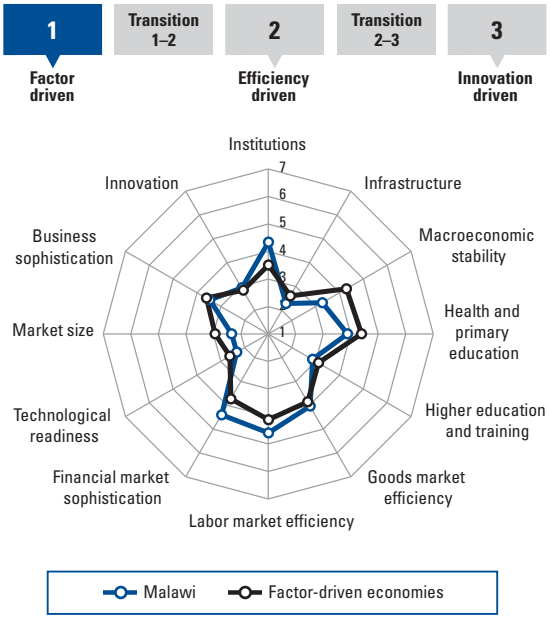
GDP (PPP) per capita (int'l $), 1980–2008



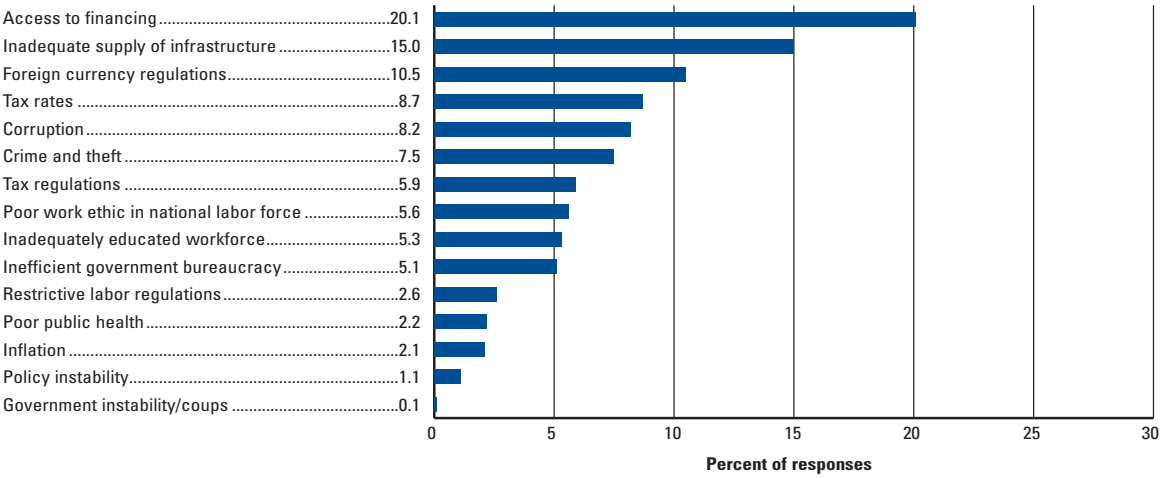
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**119**	**3.4**
GCI 2007–2008 (out of 131)	n/a	n/a
GCI 2006–2007 (out of 122)	n/a	n/a
Basic requirements	**127**	**3.4**
1st pillar: Institutions	51	4.3
2nd pillar: Infrastructure	119	2.3
3rd pillar: Macroeconomic stability	129	3.3
4th pillar: Health and primary education	120	3.9
Efficiency enhancers	**101**	**3.4**
5th pillar: Higher education and training	116	2.9
6th pillar: Goods market efficiency	84	4.0
7th pillar: Labor market efficiency	42	4.6
8th pillar: Financial market sophistication	62	4.4
9th pillar: Technological readiness	127	2.3
10th pillar: Market size	121	2.3
Innovation and sophistication factors	**101**	**3.2**
11th pillar: Business sophistication	104	3.5
12th pillar: Innovation	94	2.9

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Malawi

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	4.3	79
Intellectual property protection	3.1	90
Diversion of public funds	4.0	50
Public trust of politicians	3.0	57
Judicial independence	5.1	35
Favoritism in decisions of government officials	3.3	56
Wastefulness of government spending	4.1	31
Burden of government regulation	3.8	30
Efficiency of legal framework	4.0	52
Transparency of government policymaking	4.6	41
Business costs of terrorism	6.5	15
Business costs of crime and violence	4.4	87
Organized crime	5.5	59
Reliability of police services	4.4	61
Ethical behavior of firms	4.6	45
Strength of auditing and reporting standards	5.0	56
Efficacy of corporate boards	5.2	26
Protection of minority shareholders' interests	5.0	41
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.3	116
Quality of roads	2.5	106
Quality of railroad infrastructure	1.8	84
Quality of port infrastructure	3.5	82
Quality of air transport infrastructure	2.9	127
Available seat kilometers per week (millions)*	8.2	124
Quality of electricity supply	2.7	116
Main telephone lines (per 100 population)*	1.0	118
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–1.5	81
National savings rate (% GDP)*	–6.6	133
Inflation (%)*	8.1	100
Interest rate spread (%)*	21.7	129
Government gross debt (% GDP)*	51.3	89
4th pillar: Health and primary education		
Business impact of malaria	3.1	129
Malaria incidence (cases per 100,000 population)*	23,639.8	130
Business impact of tuberculosis	3.3	131
Tuberculosis incidence (cases per 100,000 population)*	377.0	122
Business impact of HIV/AIDS	2.5	130
HIV prevalence (% adult population)*	11.9	127
Infant mortality (deaths per 1,000 live births)*	78.0	115
Life expectancy at birth (years)*	50.0	123
Quality of primary education	2.5	121
Primary education enrollment (net rate, %)*	91.1	79
Education expenditure (% GNI)*	4.9	44
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	29.1	122
Tertiary education enrollment (gross rate, %)*	0.0	134
Quality of the educational system	3.6	72
Quality of math and science education	3.0	110
Quality of management schools	3.1	121
Internet access in schools	1.6	130
Local availability of research and training services	3.3	102
Extent of staff training	3.8	76

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.8	77
Extent of market dominance	3.1	112
Effectiveness of anti-monopoly policy	3.8	70
Extent and effect of taxation	3.0	98
Total tax rate (% profits)*	32.2	23
Number of procedures required to start a business*	10.0	75
Number of days required to start a business*	37.0	87
Agricultural policy costs	4.8	13
Prevalence of trade barriers	4.3	88
Trade-weighted tariff rate (% duty)*	12.7	115
Prevalence of foreign ownership	5.1	72
Business impact of rules on FDI	5.3	58
Burden of customs procedures	3.5	85
Degree of customer orientation	4.4	83
Buyer sophistication	2.7	117
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.6	60
Flexibility of wage determination	5.4	41
Non-wage labor costs (% worker's salary)*	1.0	9
Rigidity of Employment Index (0–100, 100 is worst)*	25.0	39
Hiring and firing practices	3.7	81
Firing costs (in weeks of wages)*	84.0	99
Pay and productivity	3.7	98
Reliance on professional management	5.2	37
Brain drain	2.5	107
Female-to-male participation ratio in labor force*	1.0	5
8th pillar: Financial market sophistication		
Financial market sophistication	3.6	90
Financing through local equity market	5.0	32
Ease of access to loans	2.5	109
Venture capital availability	2.1	121
Restriction on capital flows	3.5	113
Strength of Investor Protection (0–10, 10 is best)*	5.3	50
Soundness of banks	5.9	48
Regulation of securities exchanges	4.8	64
Strength of Legal Rights (0–10, 10 is best)*	7.0	16
9th pillar: Technological readiness		
Availability of latest technologies	3.6	114
Firm-level technology absorption	3.8	116
Laws relating to ICT	2.8	111
FDI and technology transfer	4.3	102
Mobile telephone subscribers (per 100 population)*	5.3	128
Internet users (per 100 population)*	0.5	131
Personal computers (per 100 population)*	0.2	130
Broadband internet subscribers (per 100 population)	0.0	120
10th pillar: Market size		
Domestic market size index*	2.2	115
Foreign market size index*	2.6	122
11th pillar: Business sophistication		
Local supplier quantity	4.4	97
Local supplier quality	3.7	115
State of cluster development	2.9	106
Nature of competitive advantage	2.8	118
Value chain breadth	2.5	125
Control of international distribution	3.9	72
Production process sophistication	2.0	134
Extent of marketing	3.4	112
Willingness to delegate authority	3.9	77
12th pillar: Innovation		
Capacity for innovation	2.4	121
Quality of scientific research institutions	3.9	65
Company spending on R&D	2.7	102
University-industry research collaboration	3.2	65
Gov't procurement of advanced tech products	3.7	60
Availability of scientists and engineers	3.6	101
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Mali

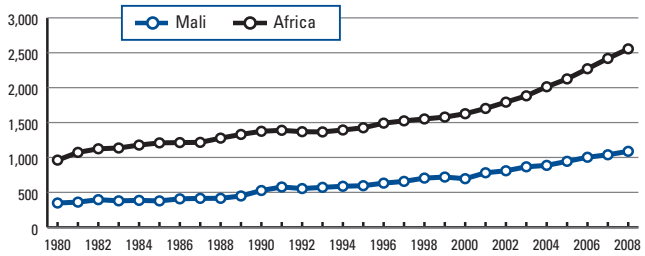
Key indicators

Population (millions), 2008 ..... 12.7
GDP (US$ billions), 2007 ..... 6.9
GDP (PPP) per capita (int'l $), 2007 ..... 1,038.5
Sectoral value-added (% GDP), 2007
- Agriculture 36.5
- Industry 24.2
- Services 39.1

Human Development Index, 2006
- Score (0–1, 1 is best) 0.39
- Rank (out of 179 economies) 168

Source: UNFPA, IMF, EIU, World Bank, UNDP.

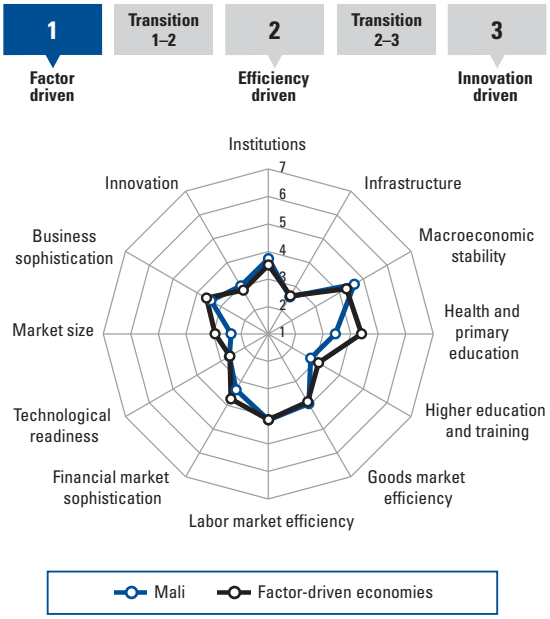
GDP (PPP) per capita (int'l $), 1980–2008



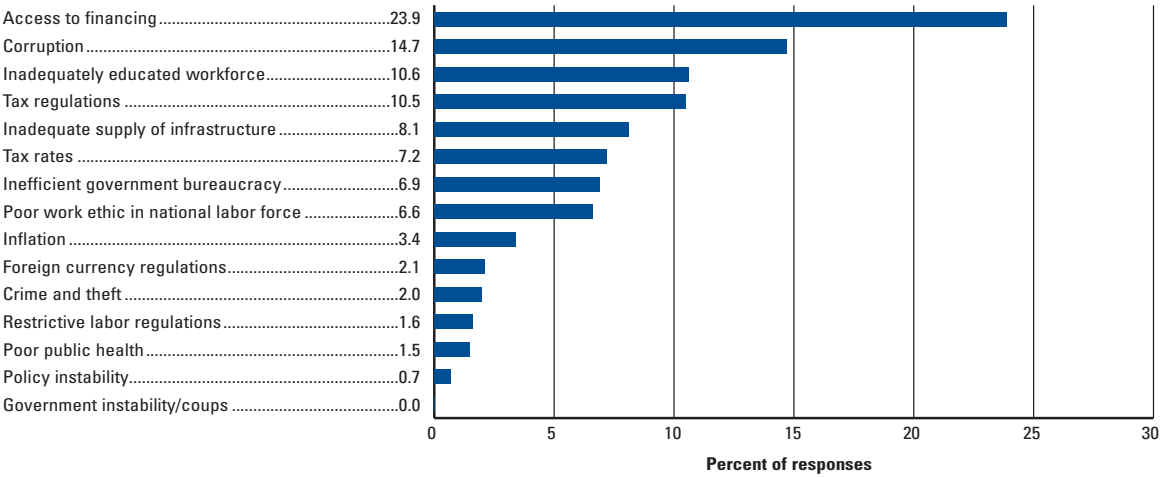
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**117**	**3.4**
GCI 2007–2008 (out of 131)	115	3.4
GCI 2006–2007 (out of 122)	115	3.3
Basic requirements	**116**	**3.6**
1st pillar: Institutions	79	3.7
2nd pillar: Infrastructure	107	2.6
3rd pillar: Macroeconomic stability	94	4.6
4th pillar: Health and primary education	130	3.4
Efficiency enhancers	**122**	**3.2**
5th pillar: Higher education and training	122	2.8
6th pillar: Goods market efficiency	95	3.9
7th pillar: Labor market efficiency	94	4.1
8th pillar: Financial market sophistication	120	3.3
9th pillar: Technological readiness	105	2.6
10th pillar: Market size	119	2.4
Innovation and sophistication factors	**99**	**3.2**
11th pillar: Business sophistication	111	3.4
12th pillar: Innovation	79	3.0

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Mali

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	4.1	91
Intellectual property protection	3.2	83
Diversion of public funds	2.7	113
Public trust of politicians	2.3	85
Judicial independence	3.7	72
Favoritism in decisions of government officials	2.9	80
Wastefulness of government spending	3.6	58
Burden of government regulation	3.6	35
Efficiency of legal framework	3.7	58
Transparency of government policymaking	4.6	40
Business costs of terrorism	5.3	92
Business costs of crime and violence	4.4	89
Organized crime	4.7	91
Reliability of police services	4.5	60
Ethical behavior of firms	4.0	74
Strength of auditing and reporting standards	3.6	117
Efficacy of corporate boards	4.1	115
Protection of minority shareholders' interests	4.3	82
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.6	106
Quality of roads	2.8	96
Quality of railroad infrastructure	1.7	89
Quality of port infrastructure	3.7	77
Quality of air transport infrastructure	3.9	95
Available seat kilometers per week (millions)*	23.9	109
Quality of electricity supply	3.5	99
Main telephone lines (per 100 population)*	0.6	127
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–1.0	73
National savings rate (% GDP)*	13.0	113
Inflation (%)*	2.5	39
Interest rate spread (%)*	11.5	118
Government gross debt (% GDP)*	n/a	n/a
4th pillar: Health and primary education		
Business impact of malaria	3.0	130
Malaria incidence (cases per 100,000 population)*	6,167.5	120
Business impact of tuberculosis	3.9	122
Tuberculosis incidence (cases per 100,000 population)*	280.0	114
Business impact of HIV/AIDS	3.8	116
HIV prevalence (% adult population)*	1.5	109
Infant mortality (deaths per 1,000 live births)*	120.0	133
Life expectancy at birth (years)*	46.0	130
Quality of primary education	2.6	113
Primary education enrollment (net rate, %)*	60.5	127
Education expenditure (% GNI)*	3.7	85
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	28.3	123
Tertiary education enrollment (gross rate, %)*	3.0	123
Quality of the educational system	2.6	119
Quality of math and science education	3.3	103
Quality of management schools	3.6	96
Internet access in schools	2.6	97
Local availability of research and training services	3.6	88
Extent of staff training	2.9	123

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.9	73
Extent of market dominance	4.0	52
Effectiveness of anti-monopoly policy	3.5	82
Extent and effect of taxation	3.7	57
Total tax rate (% profits)*	51.4	94
Number of procedures required to start a business*	11.0	91
Number of days required to start a business*	26.0	56
Agricultural policy costs	4.3	36
Prevalence of trade barriers	3.7	121
Trade-weighted tariff rate (% duty)*	9.9	100
Prevalence of foreign ownership	4.4	101
Business impact of rules on FDI	4.9	85
Burden of customs procedures	3.4	88
Degree of customer orientation	4.1	102
Buyer sophistication	2.7	121
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.7	56
Flexibility of wage determination	4.2	111
Non-wage labor costs (% worker's salary)*	28.0	107
Rigidity of Employment Index (0–100, 100 is worst)*	38.0	70
Hiring and firing practices	4.4	38
Firing costs (in weeks of wages)*	31.0	53
Pay and productivity	3.1	128
Reliance on professional management	3.4	128
Brain drain	2.6	105
Female-to-male participation ratio in labor force*	0.9	20
8th pillar: Financial market sophistication		
Financial market sophistication	2.7	116
Financing through local equity market	3.2	108
Ease of access to loans	1.9	131
Venture capital availability	2.1	126
Restriction on capital flows	4.1	95
Strength of Investor Protection (0–10, 10 is best)*	3.3	112
Soundness of banks	5.2	92
Regulation of securities exchanges	3.6	107
Strength of Legal Rights (0–10, 10 is best)*	3.0	93
9th pillar: Technological readiness		
Availability of latest technologies	3.9	95
Firm-level technology absorption	4.6	77
Laws relating to ICT	3.1	95
FDI and technology transfer	5.0	59
Mobile telephone subscribers (per 100 population)*	10.9	122
Internet users (per 100 population)*	0.6	126
Personal computers (per 100 population)*	0.4	127
Broadband internet subscribers (per 100 population)	0.0	111
10th pillar: Market size		
Domestic market size index*	2.2	116
Foreign market size index*	2.8	118
11th pillar: Business sophistication		
Local supplier quantity	4.8	73
Local supplier quality	3.9	105
State of cluster development	2.5	127
Nature of competitive advantage	3.0	99
Value chain breadth	3.1	95
Control of international distribution	3.7	100
Production process sophistication	2.7	112
Extent of marketing	3.1	120
Willingness to delegate authority	2.7	128
12th pillar: Innovation		
Capacity for innovation	2.6	101
Quality of scientific research institutions	3.7	78
Company spending on R&D	2.7	103
University-industry research collaboration	2.8	103
Gov't procurement of advanced tech products	4.2	25
Availability of scientists and engineers	4.1	72
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Mauritania

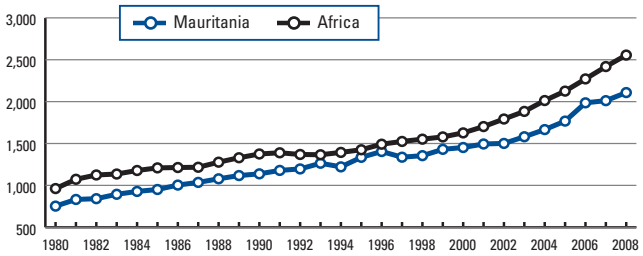
Key indicators

Population (millions), 2008 ..... 3.2
GDP (US$ billions), 2007 ..... 2.8
GDP (PPP) per capita (int'l $), 2007 ..... 2,011.5
Sectoral value-added (% GDP), 2007
- Agriculture 12.5
- Industry 46.7
- Services 40.7

Human Development Index, 2006
- Score (0–1, 1 is best) 0.56
- Rank (out of 179 economies) 140

Source: UNFPA, IMF, EIU, World Bank, UNDP.

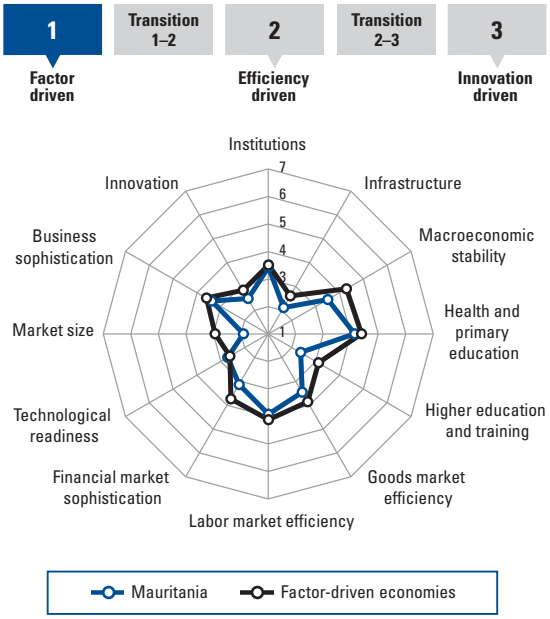
GDP (PPP) per capita (int'l $), 1980–2008



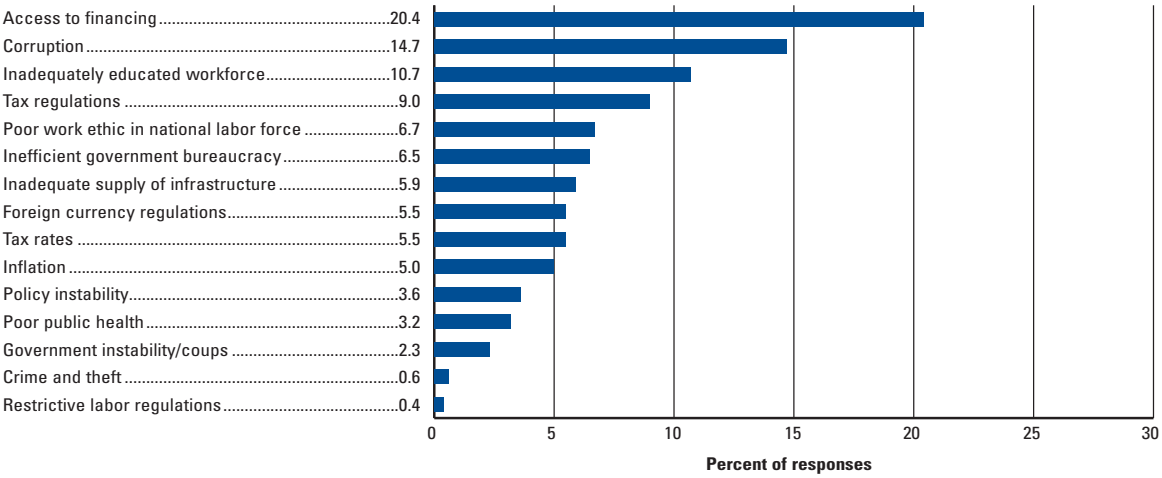
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**131**	**3.1**
GCI 2007–2008 (out of 131)	125	3.3
GCI 2006–2007 (out of 122)	117	3.2
Basic requirements	**130**	**3.3**
1st pillar: Institutions	107	3.4
2nd pillar: Infrastructure	127	2.1
3rd pillar: Macroeconomic stability	126	3.5
4th pillar: Health and primary education	114	4.1
Efficiency enhancers	**130**	**2.9**
5th pillar: Higher education and training	133	2.4
6th pillar: Goods market efficiency	126	3.4
7th pillar: Labor market efficiency	112	3.9
8th pillar: Financial market sophistication	126	3.1
9th pillar: Technological readiness	102	2.7
10th pillar: Market size	126	1.9
Innovation and sophistication factors	**120**	**2.9**
11th pillar: Business sophistication	114	3.4
12th pillar: Innovation	125	2.5

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Mauritania

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	3.9	99
Intellectual property protection	2.7	115
Diversion of public funds	2.3	123
Public trust of politicians	2.2	87
Judicial independence	3.1	99
Favoritism in decisions of government officials	2.8	85
Wastefulness of government spending	2.8	103
Burden of government regulation	4.0	19
Efficiency of legal framework	2.9	110
Transparency of government policymaking	3.9	81
Business costs of terrorism	4.8	109
Business costs of crime and violence	4.6	75
Organized crime	5.1	76
Reliability of police services	3.8	87
Ethical behavior of firms	3.6	108
Strength of auditing and reporting standards	3.0	132
Efficacy of corporate boards	4.2	108
Protection of minority shareholders' interests	3.8	109
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.1	124
Quality of roads	2.1	121
Quality of railroad infrastructure	1.6	98
Quality of port infrastructure	2.7	116
Quality of air transport infrastructure	2.9	128
Available seat kilometers per week (millions)*	6.8	128
Quality of electricity supply	3.2	105
Main telephone lines (per 100 population)*	1.1	117
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–2.8	101
National savings rate (% GDP)*	28.7	35
Inflation (%)*	7.3	92
Interest rate spread (%)*	15.5	125
Government gross debt (% GDP)*	123.2	126
4th pillar: Health and primary education		
Business impact of malaria	4.0	121
Malaria incidence (cases per 100,000 population)*	5,617.5	119
Business impact of tuberculosis	4.1	119
Tuberculosis incidence (cases per 100,000 population)*	316.0	119
Business impact of HIV/AIDS	4.3	102
HIV prevalence (% adult population)*	0.8	95
Infant mortality (deaths per 1,000 live births)*	78.0	115
Life expectancy at birth (years)*	58.0	114
Quality of primary education	2.4	123
Primary education enrollment (net rate, %)*	79.5	111
Education expenditure (% GNI)*	2.4	114
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	25.0	124
Tertiary education enrollment (gross rate, %)*	3.5	121
Quality of the educational system	2.3	129
Quality of math and science education	3.3	101
Quality of management schools	2.5	131
Internet access in schools	2.1	120
Local availability of research and training services	2.8	129
Extent of staff training	2.7	130

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.1	116
Extent of market dominance	2.4	134
Effectiveness of anti-monopoly policy	3.6	79
Extent and effect of taxation	3.9	43
Total tax rate (% profits)*	107.5	125
Number of procedures required to start a business*	11.0	91
Number of days required to start a business*	65.0	112
Agricultural policy costs	3.8	80
Prevalence of trade barriers	4.4	86
Trade-weighted tariff rate (% duty)*	8.0	86
Prevalence of foreign ownership	3.4	129
Business impact of rules on FDI	4.6	96
Burden of customs procedures	3.4	89
Degree of customer orientation	4.2	96
Buyer sophistication	2.5	127
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	5.0	28
Flexibility of wage determination	5.5	35
Non-wage labor costs (% worker's salary)*	16.0	65
Rigidity of Employment Index (0–100, 100 is worst)*	45.0	90
Hiring and firing practices	3.9	63
Firing costs (in weeks of wages)*	31.0	53
Pay and productivity	3.4	120
Reliance on professional management	3.2	130
Brain drain	2.5	108
Female-to-male participation ratio in labor force*	0.7	92
8th pillar: Financial market sophistication		
Financial market sophistication	2.5	124
Financing through local equity market	2.5	127
Ease of access to loans	2.4	115
Venture capital availability	2.2	116
Restriction on capital flows	3.4	117
Strength of Investor Protection (0–10, 10 is best)*	3.7	107
Soundness of banks	4.6	119
Regulation of securities exchanges	2.7	132
Strength of Legal Rights (0–10, 10 is best)*	4.0	72
9th pillar: Technological readiness		
Availability of latest technologies	4.6	67
Firm-level technology absorption	4.6	79
Laws relating to ICT	2.7	119
FDI and technology transfer	4.1	118
Mobile telephone subscribers (per 100 population)*	33.6	91
Internet users (per 100 population)*	1.0	123
Personal computers (per 100 population)*	4.4	89
Broadband internet subscribers (per 100 population)	0.0	109
10th pillar: Market size		
Domestic market size index*	1.6	127
Foreign market size index*	2.8	120
11th pillar: Business sophistication		
Local supplier quantity	4.9	59
Local supplier quality	3.9	110
State of cluster development	3.1	89
Nature of competitive advantage	2.9	111
Value chain breadth	2.2	133
Control of international distribution	3.6	107
Production process sophistication	2.7	111
Extent of marketing	2.7	131
Willingness to delegate authority	2.5	133
12th pillar: Innovation		
Capacity for innovation	2.6	109
Quality of scientific research institutions	2.5	131
Company spending on R&D	2.5	122
University-industry research collaboration	2.2	128
Gov't procurement of advanced tech products	3.5	76
Availability of scientists and engineers	3.1	121
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

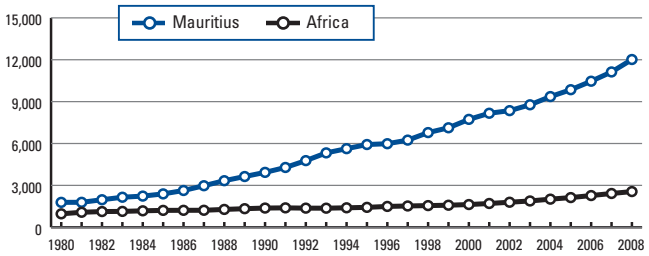
Mauritius

Key indicators

Population (millions), 2008	1.3
GDP (US$ billions), 2007	6.9
GDP (PPP) per capita (int'l $), 2007	11,126.0
Sectoral value-added (% GDP), 2007	
Agriculture	5.0
Industry	25.2
Services	69.8
Human Development Index, 2006	
Score (0–1, 1 is best)	0.80
Rank (out of 179 economies)	74

Source: UNFPA, IMF, EIU, World Bank, UNDP.

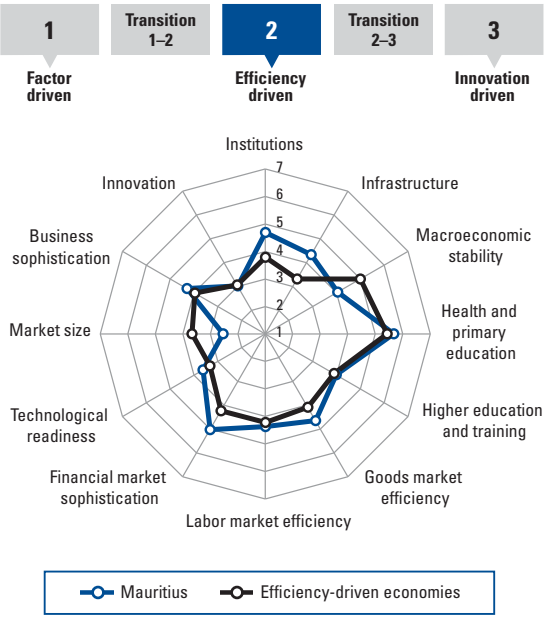
GDP (PPP) per capita (int'l $), 1980–2008



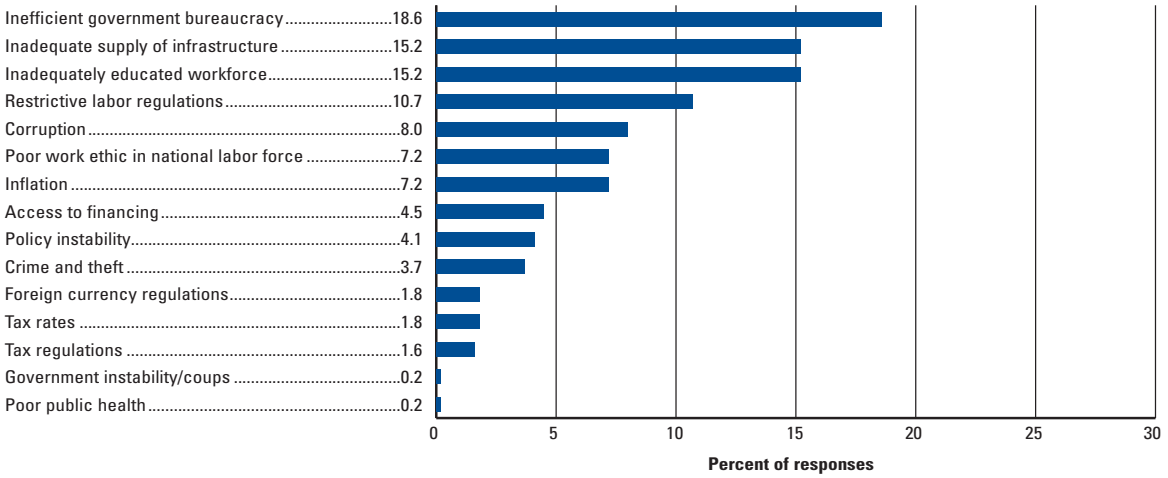
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**57**	**4.2**
GCI 2007–2008 (out of 131)	60	4.2
GCI 2006–2007 (out of 122)	55	4.2
Basic requirements	**50**	**4.7**
1st pillar: Institutions	39	4.7
2nd pillar: Infrastructure	43	4.3
3rd pillar: Macroeconomic stability	117	4.0
4th pillar: Health and primary education	57	5.7
Efficiency enhancers	**66**	**4.0**
5th pillar: Higher education and training	67	4.0
6th pillar: Goods market efficiency	40	4.6
7th pillar: Labor market efficiency	65	4.4
8th pillar: Financial market sophistication	32	5.0
9th pillar: Technological readiness	55	3.6
10th pillar: Market size	110	2.5
Innovation and sophistication factors	**69**	**3.6**
11th pillar: Business sophistication	55	4.3
12th pillar: Innovation	80	3.0

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Mauritius

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	5.9	22
Intellectual property protection	4.1	46
Diversion of public funds	4.5	41
Public trust of politicians	2.7	66
Judicial independence	5.0	38
Favoritism in decisions of government officials	3.3	54
Wastefulness of government spending	3.7	51
Burden of government regulation	3.8	31
Efficiency of legal framework	4.7	34
Transparency of government policymaking	4.9	30
Business costs of terrorism	6.7	5
Business costs of crime and violence	5.1	55
Organized crime	6.4	16
Reliability of police services	4.3	66
Ethical behavior of firms	4.6	43
Strength of auditing and reporting standards	5.6	31
Efficacy of corporate boards	4.9	49
Protection of minority shareholders' interests	5.4	27
2nd pillar: Infrastructure		
Quality of overall infrastructure	4.5	45
Quality of roads	4.5	43
Quality of railroad infrastructure	n/a	n/a
Quality of port infrastructure	4.4	47
Quality of air transport infrastructure	5.4	42
Available seat kilometers per week (millions)*	181.8	59
Quality of electricity supply	5.4	47
Main telephone lines (per 100 population)*	28.5	43
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–4.3	115
National savings rate (% GDP)*	31.0	25
Inflation (%)*	10.7	120
Interest rate spread (%)*	10.1	113
Government gross debt (% GDP)*	57.0	100
4th pillar: Health and primary education		
Business impact of malaria	6.6	48
Malaria incidence (cases per 100,000 population)*	1.8	70
Business impact of tuberculosis	6.5	30
Tuberculosis incidence (cases per 100,000 population)*	23.0	41
Business impact of HIV/AIDS	5.4	65
HIV prevalence (% adult population)*	1.7	114
Infant mortality (deaths per 1,000 live births)*	13.0	56
Life expectancy at birth (years)*	73.0	55
Quality of primary education	3.9	60
Primary education enrollment (net rate, %)*	95.0	51
Education expenditure (% GNI)*	3.8	79
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	88.4	63
Tertiary education enrollment (gross rate, %)*	17.1	90
Quality of the educational system	4.0	47
Quality of math and science education	4.2	58
Quality of management schools	3.7	90
Internet access in schools	3.5	63
Local availability of research and training services	3.6	90
Extent of staff training	4.6	36

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.8	80
Extent of market dominance	2.9	119
Effectiveness of anti-monopoly policy	3.6	74
Extent and effect of taxation	5.4	8
Total tax rate (% profits)*	21.7	8
Number of procedures required to start a business*	6.0	19
Number of days required to start a business*	7.0	9
Agricultural policy costs	4.5	24
Prevalence of trade barriers	5.4	30
Trade-weighted tariff rate (% duty)*	3.6	43
Prevalence of foreign ownership	5.6	43
Business impact of rules on FDI	6.1	8
Burden of customs procedures	4.6	33
Degree of customer orientation	4.9	48
Buyer sophistication	3.8	55
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.8	43
Flexibility of wage determination	3.9	118
Non-wage labor costs (% worker's salary)*	6.0	20
Rigidity of Employment Index (0–100, 100 is worst)*	23.0	29
Hiring and firing practices	3.1	110
Firing costs (in weeks of wages)*	35.0	61
Pay and productivity	4.2	65
Reliance on professional management	4.7	66
Brain drain	3.0	79
Female-to-male participation ratio in labor force*	0.6	108
8th pillar: Financial market sophistication		
Financial market sophistication	4.9	44
Financing through local equity market	4.7	45
Ease of access to loans	4.1	34
Venture capital availability	3.4	47
Restriction on capital flows	6.2	4
Strength of Investor Protection (0–10, 10 is best)*	7.7	11
Soundness of banks	6.2	28
Regulation of securities exchanges	5.4	29
Strength of Legal Rights (0–10, 10 is best)*	5.0	52
9th pillar: Technological readiness		
Availability of latest technologies	5.1	47
Firm-level technology absorption	4.8	64
Laws relating to ICT	4.2	48
FDI and technology transfer	5.2	42
Mobile telephone subscribers (per 100 population)*	61.5	73
Internet users (per 100 population)*	25.5	50
Personal computers (per 100 population)*	17.5	46
Broadband internet subscribers (per 100 population)	1.7	62
10th pillar: Market size		
Domestic market size index*	2.3	113
Foreign market size index*	3.3	102
11th pillar: Business sophistication		
Local supplier quantity	4.8	64
Local supplier quality	4.6	68
State of cluster development	3.7	55
Nature of competitive advantage	3.5	66
Value chain breadth	4.7	25
Control of international distribution	4.4	42
Production process sophistication	3.8	58
Extent of marketing	4.4	72
Willingness to delegate authority	4.2	59
12th pillar: Innovation		
Capacity for innovation	2.7	99
Quality of scientific research institutions	4.0	61
Company spending on R&D	3.0	70
University-industry research collaboration	3.1	69
Gov't procurement of advanced tech products	3.5	74
Availability of scientists and engineers	3.3	114
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Morocco

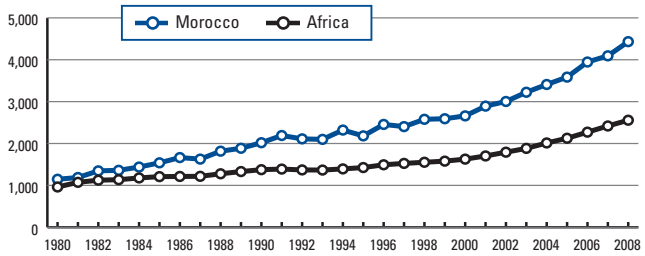
Key indicators

Population (millions), 2008 ..... 31.6
GDP (US$ billions), 2007 ..... 75.1
GDP (PPP) per capita (int'l $), 2007 ..... 4,093.7
Sectoral value-added (% GDP), 2007
- Agriculture 12.4
- Industry 29.0
- Services 58.5

Human Development Index, 2006
- Score (0–1, 1 is best) 0.65
- Rank (out of 179 economies) 127

Source: UNFPA, IMF, EIU, World Bank, UNDP.

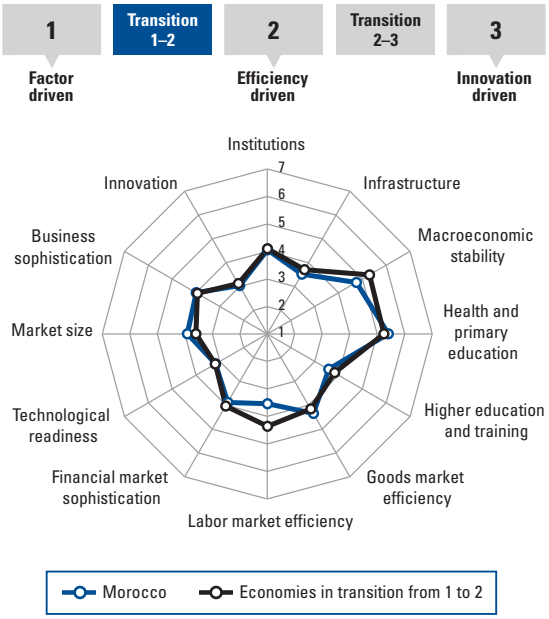
GDP (PPP) per capita (int'l $), 1980–2008



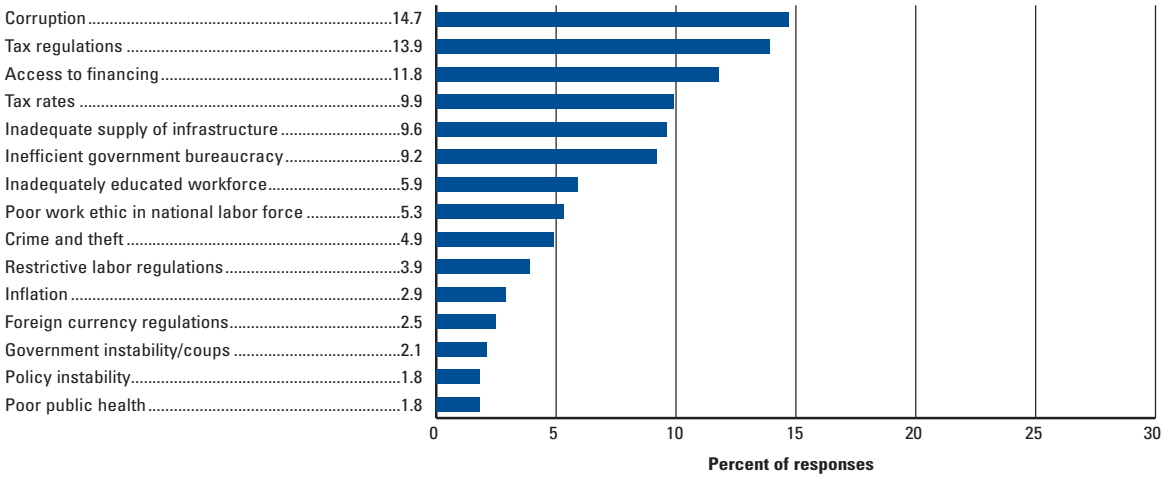
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**73**	**4.1**
GCI 2007–2008 (out of 131)	64	4.1
GCI 2006–2007 (out of 122)	65	4.1
Basic requirements	**67**	**4.4**
1st pillar: Institutions	61	4.0
2nd pillar: Infrastructure	70	3.5
3rd pillar: Macroeconomic stability	84	4.7
4th pillar: Health and primary education	71	5.4
Efficiency enhancers	**85**	**3.7**
5th pillar: Higher education and training	90	3.6
6th pillar: Goods market efficiency	58	4.3
7th pillar: Labor market efficiency	128	3.5
8th pillar: Financial market sophistication	93	3.9
9th pillar: Technological readiness	78	3.2
10th pillar: Market size	57	3.9
Innovation and sophistication factors	**76**	**3.5**
11th pillar: Business sophistication	70	4.0
12th pillar: Innovation	78	3.0

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Morocco

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	4.7	66
Intellectual property protection	3.3	78
Diversion of public funds	3.6	57
Public trust of politicians	3.0	55
Judicial independence	3.9	65
Favoritism in decisions of government officials	3.6	42
Wastefulness of government spending	3.8	44
Burden of government regulation	3.5	46
Efficiency of legal framework	3.7	62
Transparency of government policymaking	4.4	47
Business costs of terrorism	4.7	113
Business costs of crime and violence	4.8	66
Organized crime	4.9	82
Reliability of police services	4.8	47
Ethical behavior of firms	4.1	66
Strength of auditing and reporting standards	4.3	89
Efficacy of corporate boards	4.3	102
Protection of minority shareholders' interests	4.5	67
2nd pillar: Infrastructure		
Quality of overall infrastructure	3.5	67
Quality of roads	3.6	62
Quality of railroad infrastructure	3.2	47
Quality of port infrastructure	4.2	59
Quality of air transport infrastructure	4.8	61
Available seat kilometers per week (millions)*	300.4	50
Quality of electricity supply	5.2	51
Main telephone lines (per 100 population)*	4.1	106
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–3.4	111
National savings rate (% GDP)*	25.6	50
Inflation (%)*	2.0	22
Interest rate spread (%)*	7.2	91
Government gross debt (% GDP)*	72.4	111
4th pillar: Health and primary education		
Business impact of malaria	5.5	92
Malaria incidence (cases per 100,000 population)*	0.2	64
Business impact of tuberculosis	5.0	95
Tuberculosis incidence (cases per 100,000 population)*	93.0	86
Business impact of HIV/AIDS	4.8	88
HIV prevalence (% adult population)*	0.1	23
Infant mortality (deaths per 1,000 live births)*	36.0	96
Life expectancy at birth (years)*	72.0	66
Quality of primary education	3.2	85
Primary education enrollment (net rate, %)*	88.1	98
Education expenditure (% GNI)*	6.5	15
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	52.4	107
Tertiary education enrollment (gross rate, %)*	11.8	99
Quality of the educational system	3.0	100
Quality of math and science education	4.0	67
Quality of management schools	4.2	63
Internet access in schools	3.3	70
Local availability of research and training services	3.8	69
Extent of staff training	3.7	79

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.6	89
Extent of market dominance	3.9	59
Effectiveness of anti-monopoly policy	4.2	46
Extent and effect of taxation	3.5	66
Total tax rate (% profits)*	53.1	101
Number of procedures required to start a business*	6.0	19
Number of days required to start a business*	12.0	22
Agricultural policy costs	3.5	108
Prevalence of trade barriers	4.2	100
Trade-weighted tariff rate (% duty)*	12.7	114
Prevalence of foreign ownership	4.9	85
Business impact of rules on FDI	5.1	74
Burden of customs procedures	4.2	51
Degree of customer orientation	5.0	42
Buyer sophistication	3.9	46
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.3	93
Flexibility of wage determination	5.2	68
Non-wage labor costs (% worker's salary)*	19.0	80
Rigidity of Employment Index (0–100, 100 is worst)*	63.0	121
Hiring and firing practices	3.9	60
Firing costs (in weeks of wages)*	85.0	101
Pay and productivity	3.9	87
Reliance on professional management	4.0	100
Brain drain	3.1	77
Female-to-male participation ratio in labor force*	0.3	131
8th pillar: Financial market sophistication		
Financial market sophistication	4.3	62
Financing through local equity market	4.4	73
Ease of access to loans	3.4	69
Venture capital availability	3.0	67
Restriction on capital flows	3.6	112
Strength of Investor Protection (0–10, 10 is best)*	3.0	118
Soundness of banks	5.2	89
Regulation of securities exchanges	4.5	72
Strength of Legal Rights (0–10, 10 is best)*	3.0	93
9th pillar: Technological readiness		
Availability of latest technologies	4.8	57
Firm-level technology absorption	4.7	70
Laws relating to ICT	3.1	97
FDI and technology transfer	4.8	72
Mobile telephone subscribers (per 100 population)*	52.1	81
Internet users (per 100 population)*	19.8	61
Personal computers (per 100 population)*	3.0	95
Broadband internet subscribers (per 100 population)	1.3	66
10th pillar: Market size		
Domestic market size index*	3.8	56
Foreign market size index*	4.3	64
11th pillar: Business sophistication		
Local supplier quantity	4.8	69
Local supplier quality	4.3	86
State of cluster development	3.7	52
Nature of competitive advantage	3.3	82
Value chain breadth	4.1	40
Control of international distribution	4.0	68
Production process sophistication	3.5	70
Extent of marketing	4.1	81
Willingness to delegate authority	3.3	114
12th pillar: Innovation		
Capacity for innovation	2.8	87
Quality of scientific research institutions	3.5	94
Company spending on R&D	3.0	69
University-industry research collaboration	2.8	99
Gov't procurement of advanced tech products	3.7	58
Availability of scientists and engineers	4.2	68
USPTO utility patents (per million population)*	0.0	82

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Mozambique

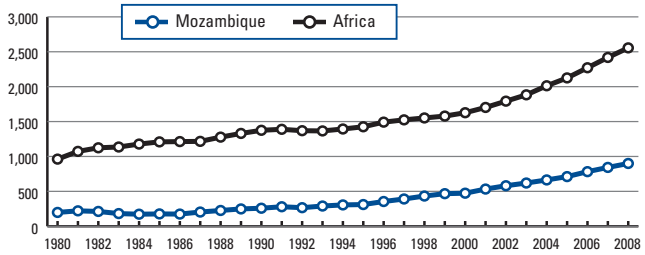
Key indicators

Population (millions), 2008 ..... 21.8
GDP (US$ billions), 2007 ..... 8.1
GDP (PPP) per capita (int'l $), 2007 ..... 842.9
Sectoral value-added (% GDP), 2007
- Agriculture 28.3
- Industry 26.6
- Services 45.1

Human Development Index, 2006
- Score (0–1, 1 is best) 0.37
- Rank (out of 179 economies) 175

Source: UNFPA, IMF, EIU, World Bank, UNDP.

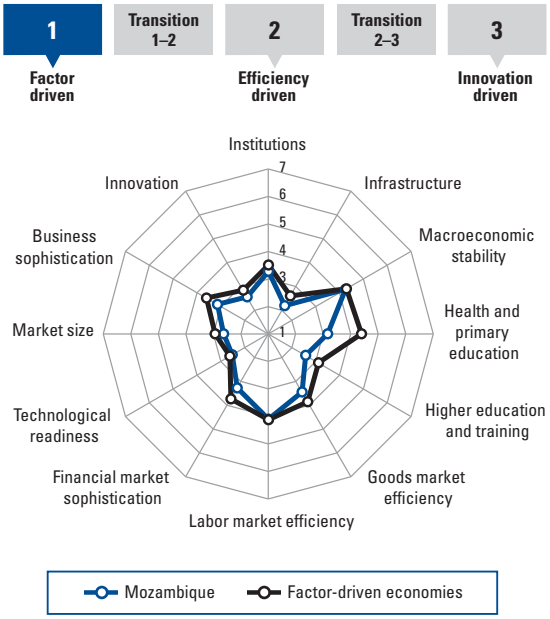
GDP (PPP) per capita (int'l $), 1980–2008



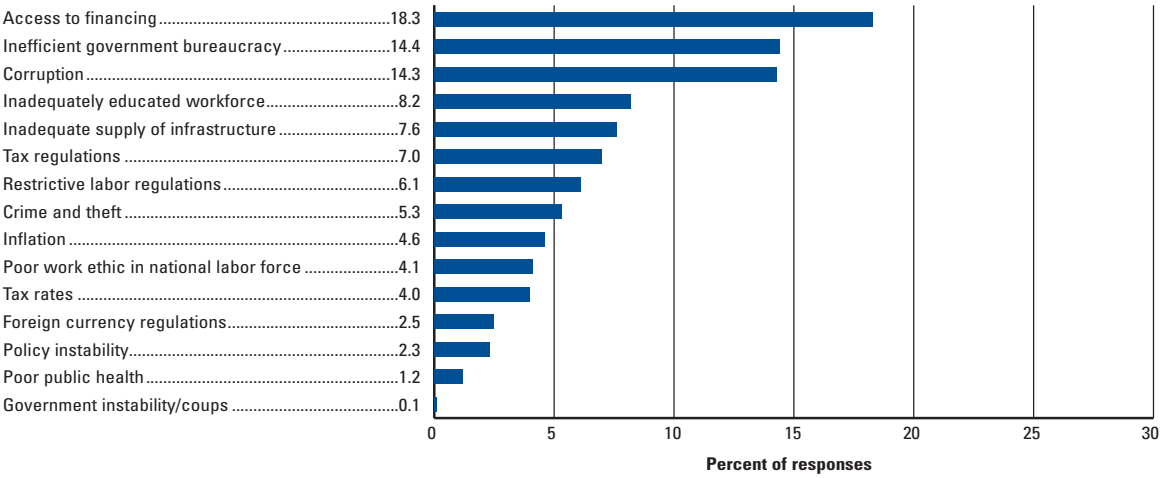
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**130**	**3.1**
GCI 2007–2008 (out of 131)	128	3.0
GCI 2006–2007 (out of 122)	119	3.2
Basic requirements	**131**	**3.2**
1st pillar: Institutions	112	3.3
2nd pillar: Infrastructure	124	2.2
3rd pillar: Macroeconomic stability	112	4.2
4th pillar: Health and primary education	132	3.2
Efficiency enhancers	**129**	**3.1**
5th pillar: Higher education and training	129	2.6
6th pillar: Goods market efficiency	127	3.4
7th pillar: Labor market efficiency	98	4.1
8th pillar: Financial market sophistication	122	3.3
9th pillar: Technological readiness	116	2.5
10th pillar: Market size	107	2.6
Innovation and sophistication factors	**127**	**2.8**
11th pillar: Business sophistication	128	3.1
12th pillar: Innovation	120	2.5

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Mozambique

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	3.5	116
Intellectual property protection	2.5	119
Diversion of public funds	2.7	112
Public trust of politicians	2.1	91
Judicial independence	3.1	101
Favoritism in decisions of government officials	3.0	78
Wastefulness of government spending	3.3	70
Burden of government regulation	3.2	66
Efficiency of legal framework	3.0	101
Transparency of government policymaking	3.8	93
Business costs of terrorism	5.2	93
Business costs of crime and violence	3.4	115
Organized crime	4.3	104
Reliability of police services	2.8	118
Ethical behavior of firms	3.3	122
Strength of auditing and reporting standards	3.8	107
Efficacy of corporate boards	4.0	120
Protection of minority shareholders' interests	3.7	116
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.1	126
Quality of roads	2.0	122
Quality of railroad infrastructure	1.8	82
Quality of port infrastructure	2.8	111
Quality of air transport infrastructure	3.5	113
Available seat kilometers per week (millions)*	26.3	106
Quality of electricity supply	3.7	93
Main telephone lines (per 100 population)*	0.3	131
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–5.1	120
National savings rate (% GDP)*	11.1	122
Inflation (%)*	7.9	97
Interest rate spread (%)*	7.6	97
Government gross debt (% GDP)*	22.2	33
4th pillar: Health and primary education		
Business impact of malaria	2.6	133
Malaria incidence (cases per 100,000 population)*	26,193.8	131
Business impact of tuberculosis	3.1	133
Tuberculosis incidence (cases per 100,000 population)*	443.0	126
Business impact of HIV/AIDS	2.3	132
HIV prevalence (% adult population)*	12.5	128
Infant mortality (deaths per 1,000 live births)*	100.0	126
Life expectancy at birth (years)*	50.0	123
Quality of primary education	2.3	126
Primary education enrollment (net rate, %)*	76.0	115
Education expenditure (% GNI)*	3.7	83
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	15.5	130
Tertiary education enrollment (gross rate, %)*	1.5	131
Quality of the educational system	2.7	115
Quality of math and science education	2.7	123
Quality of management schools	2.7	129
Internet access in schools	2.2	116
Local availability of research and training services	3.1	116
Extent of staff training	3.8	74

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	3.5	129
Extent of market dominance	2.8	122
Effectiveness of anti-monopoly policy	2.9	120
Extent and effect of taxation	3.1	91
Total tax rate (% profits)*	34.3	32
Number of procedures required to start a business*	10.0	75
Number of days required to start a business*	29.0	66
Agricultural policy costs	3.3	115
Prevalence of trade barriers	4.1	107
Trade-weighted tariff rate (% duty)*	7.7	83
Prevalence of foreign ownership	4.8	88
Business impact of rules on FDI	4.8	91
Burden of customs procedures	2.8	115
Degree of customer orientation	3.3	132
Buyer sophistication	2.4	131
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	3.8	114
Flexibility of wage determination	4.0	116
Non-wage labor costs (% worker's salary)*	4.0	14
Rigidity of Employment Index (0–100, 100 is worst)*	54.0	111
Hiring and firing practices	3.4	97
Firing costs (in weeks of wages)*	143.0	122
Pay and productivity	3.7	100
Reliance on professional management	3.9	105
Brain drain	3.1	78
Female-to-male participation ratio in labor force*	1.0	1
8th pillar: Financial market sophistication		
Financial market sophistication	2.6	123
Financing through local equity market	2.7	120
Ease of access to loans	2.2	123
Venture capital availability	2.1	122
Restriction on capital flows	2.8	132
Strength of Investor Protection (0–10, 10 is best)*	6.0	26
Soundness of banks	4.9	106
Regulation of securities exchanges	3.4	112
Strength of Legal Rights (0–10, 10 is best)*	3.0	93
9th pillar: Technological readiness		
Availability of latest technologies	3.9	100
Firm-level technology absorption	4.2	104
Laws relating to ICT	2.8	112
FDI and technology transfer	4.7	85
Mobile telephone subscribers (per 100 population)*	11.6	121
Internet users (per 100 population)*	0.9	124
Personal computers (per 100 population)*	1.4	111
Broadband internet subscribers (per 100 population)	0.0	126
10th pillar: Market size		
Domestic market size index*	2.4	107
Foreign market size index*	3.2	105
11th pillar: Business sophistication		
Local supplier quantity	3.7	127
Local supplier quality	3.1	133
State of cluster development	2.8	110
Nature of competitive advantage	2.8	117
Value chain breadth	2.5	126
Control of international distribution	3.4	121
Production process sophistication	2.8	106
Extent of marketing	3.2	119
Willingness to delegate authority	3.5	102
12th pillar: Innovation		
Capacity for innovation	2.3	125
Quality of scientific research institutions	3.1	114
Company spending on R&D	2.4	123
University-industry research collaboration	2.8	102
Gov't procurement of advanced tech products	3.3	94
Availability of scientists and engineers	3.0	127
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

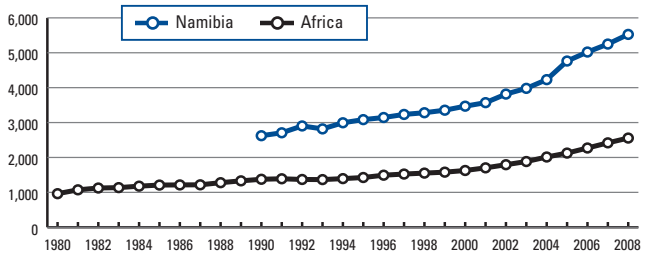
Namibia

Key indicators

Population (millions), 2008	2.1
GDP (US$ billions), 2007	7.4
GDP (PPP) per capita (int'l $), 2007	5,249.6
Sectoral value-added (% GDP), 2007	
Agriculture	11.2
Industry	30.1
Services	58.6
Human Development Index, 2006	
Score (0–1, 1 is best)	0.63
Rank (out of 179 economies)	129

Source: UNFPA, IMF, EIU, World Bank, UNDP.

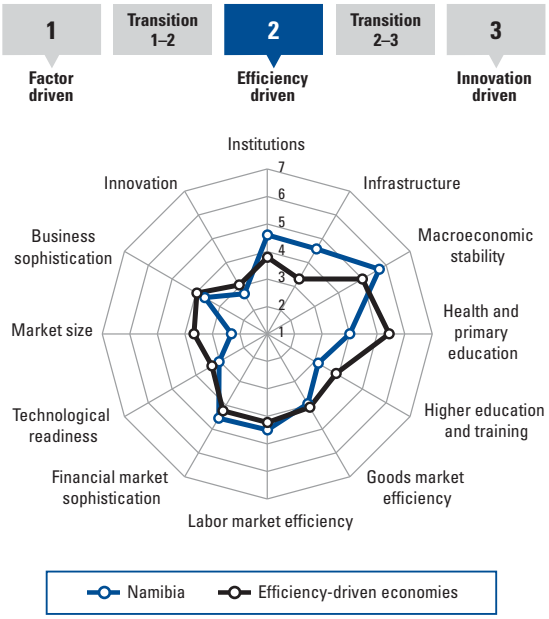
GDP (PPP) per capita (int'l $), 1980–2008



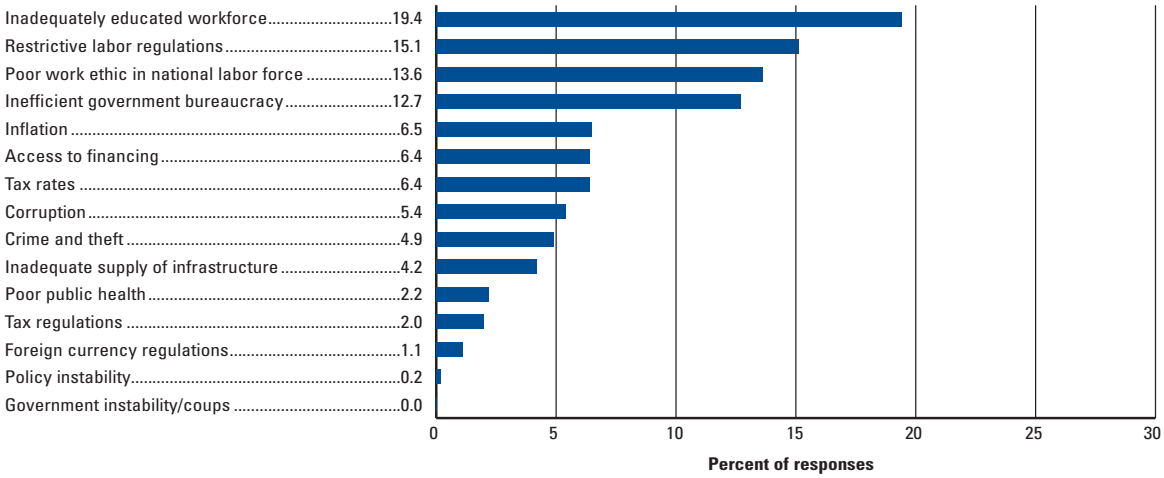
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**80**	**4.0**
GCI 2007–2008 (out of 131)	89	3.8
GCI 2006–2007 (out of 122)	72	4.0
Basic requirements	**48**	**4.7**
1st pillar: Institutions	42	4.6
2nd pillar: Infrastructure	33	4.6
3rd pillar: Macroeconomic stability	27	5.7
4th pillar: Health and primary education	118	4.0
Efficiency enhancers	**93**	**3.6**
5th pillar: Higher education and training	110	3.1
6th pillar: Goods market efficiency	94	3.9
7th pillar: Labor market efficiency	50	4.5
8th pillar: Financial market sophistication	53	4.5
9th pillar: Technological readiness	85	3.0
10th pillar: Market size	122	2.3
Innovation and sophistication factors	**104**	**3.2**
11th pillar: Business sophistication	94	3.6
12th pillar: Innovation	111	2.7

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Namibia

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	5.8	25
Intellectual property protection	4.5	37
Diversion of public funds	3.8	53
Public trust of politicians	3.6	34
Judicial independence	5.5	22
Favoritism in decisions of government officials	3.3	53
Wastefulness of government spending	3.5	61
Burden of government regulation	3.4	52
Efficiency of legal framework	4.8	32
Transparency of government policymaking	4.3	51
Business costs of terrorism	6.3	30
Business costs of crime and violence	3.9	105
Organized crime	5.5	58
Reliability of police services	4.0	80
Ethical behavior of firms	4.5	51
Strength of auditing and reporting standards	5.7	27
Efficacy of corporate boards	5.0	40
Protection of minority shareholders' interests	5.3	29
2nd pillar: Infrastructure		
Quality of overall infrastructure	5.1	26
Quality of roads	5.4	23
Quality of railroad infrastructure	4.3	24
Quality of port infrastructure	5.3	24
Quality of air transport infrastructure	5.1	50
Available seat kilometers per week (millions)*	29.3	105
Quality of electricity supply	5.0	57
Main telephone lines (per 100 population)*	6.6	99
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	1.9	35
National savings rate (% GDP)*	45.2	8
Inflation (%)*	6.7	83
Interest rate spread (%)*	5.3	66
Government gross debt (% GDP)*	21.8	32
4th pillar: Health and primary education		
Business impact of malaria	4.8	110
Malaria incidence (cases per 100,000 population)*	22,101.8	129
Business impact of tuberculosis	4.2	116
Tuberculosis incidence (cases per 100,000 population)*	767.0	133
Business impact of HIV/AIDS	3.0	125
HIV prevalence (% adult population)*	15.3	130
Infant mortality (deaths per 1,000 live births)*	46.0	99
Life expectancy at birth (years)*	61.0	110
Quality of primary education	3.0	95
Primary education enrollment (net rate, %)*	76.4	114
Education expenditure (% GNI)*	7.3	7
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	56.9	103
Tertiary education enrollment (gross rate, %)*	5.8	112
Quality of the educational system	2.7	114
Quality of math and science education	2.8	121
Quality of management schools	2.4	133
Internet access in schools	2.5	102
Local availability of research and training services	2.6	134
Extent of staff training	4.3	44

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.5	99
Extent of market dominance	3.2	101
Effectiveness of anti-monopoly policy	3.5	88
Extent and effect of taxation	3.7	52
Total tax rate (% profits)*	26.5	13
Number of procedures required to start a business*	10.0	75
Number of days required to start a business*	99.0	122
Agricultural policy costs	4.0	61
Prevalence of trade barriers	4.9	47
Trade-weighted tariff rate (% duty)*	8.5	91
Prevalence of foreign ownership	5.3	61
Business impact of rules on FDI	5.1	72
Burden of customs procedures	4.1	53
Degree of customer orientation	3.8	120
Buyer sophistication	3.6	73
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	3.5	127
Flexibility of wage determination	4.9	87
Non-wage labor costs (% worker's salary)*	0.0	1
Rigidity of Employment Index (0–100, 100 is worst)*	20.0	22
Hiring and firing practices	2.2	131
Firing costs (in weeks of wages)*	24.0	39
Pay and productivity	3.6	110
Reliance on professional management	5.2	39
Brain drain	3.4	60
Female-to-male participation ratio in labor force*	0.7	70
8th pillar: Financial market sophistication		
Financial market sophistication	4.9	42
Financing through local equity market	4.5	68
Ease of access to loans	3.4	61
Venture capital availability	2.9	73
Restriction on capital flows	3.9	105
Strength of Investor Protection (0–10, 10 is best)*	5.3	50
Soundness of banks	6.5	17
Regulation of securities exchanges	4.8	65
Strength of Legal Rights (0–10, 10 is best)*	5.0	52
9th pillar: Technological readiness		
Availability of latest technologies	4.9	53
Firm-level technology absorption	4.6	74
Laws relating to ICT	3.2	93
FDI and technology transfer	4.8	74
Mobile telephone subscribers (per 100 population)*	29.7	98
Internet users (per 100 population)*	4.4	110
Personal computers (per 100 population)*	19.5	41
Broadband internet subscribers (per 100 population)	0.0	116
10th pillar: Market size		
Domestic market size index*	2.0	122
Foreign market size index*	3.1	108
11th pillar: Business sophistication		
Local supplier quantity	3.6	128
Local supplier quality	4.1	90
State of cluster development	3.2	87
Nature of competitive advantage	3.5	63
Value chain breadth	2.7	120
Control of international distribution	3.5	112
Production process sophistication	3.3	81
Extent of marketing	4.1	79
Willingness to delegate authority	4.0	75
12th pillar: Innovation		
Capacity for innovation	2.6	112
Quality of scientific research institutions	3.2	109
Company spending on R&D	2.9	78
University-industry research collaboration	2.5	113
Gov't procurement of advanced tech products	3.0	113
Availability of scientists and engineers	2.6	132
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

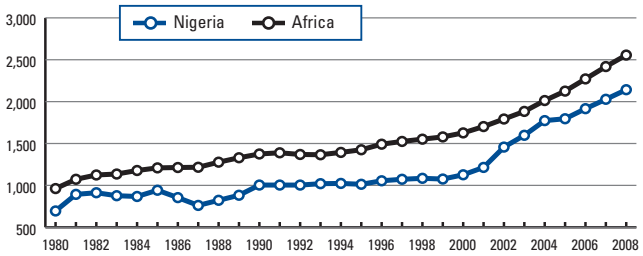
Nigeria

Key indicators

Population (millions), 2008	151.5
GDP (US$ billions), 2007	167.0
GDP (PPP) per capita (int'l $), 2007	2,027.8
Sectoral value-added (% GDP), 2007	
Agriculture	32.5
Industry	39.4
Services	28.0
Human Development Index, 2006	
Score (0–1, 1 is best)	0.50
Rank (out of 179 economies)	154

Source: UNFPA, IMF, EIU, World Bank, UNDP.

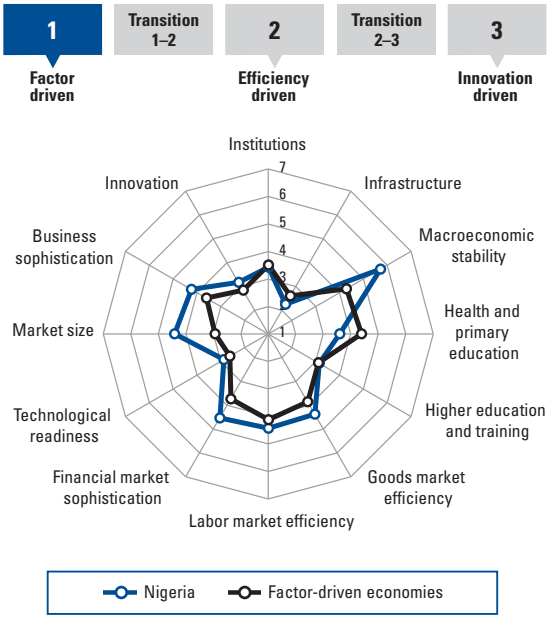
GDP (PPP) per capita (int'l $), 1980–2008



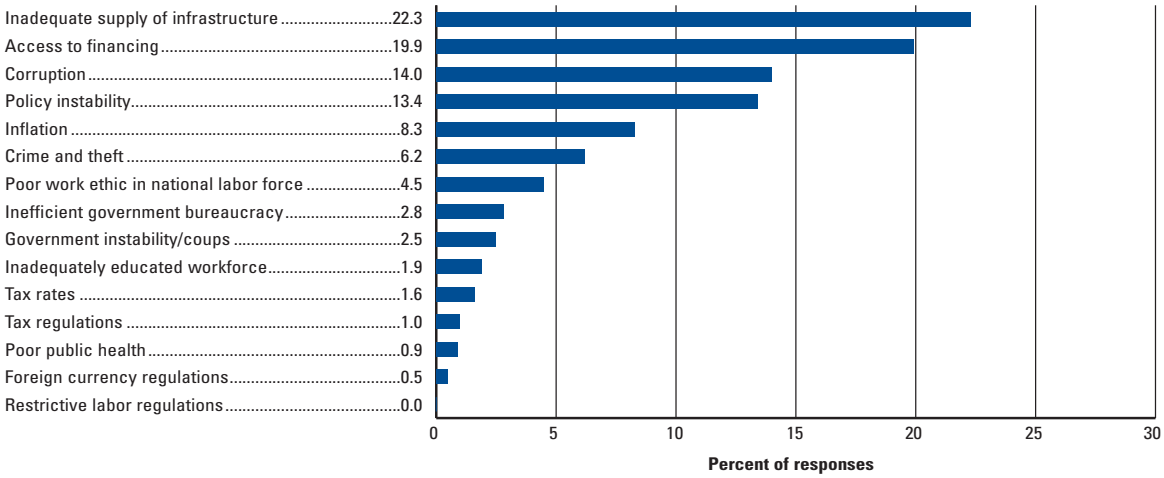
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**94**	**3.8**
GCI 2007–2008 (out of 131)	95	3.7
GCI 2006–2007 (out of 122)	95	3.6
Basic requirements	**105**	**3.7**
1st pillar: Institutions	106	3.4
2nd pillar: Infrastructure	120	2.2
3rd pillar: Macroeconomic stability	26	5.7
4th pillar: Health and primary education	126	3.6
Efficiency enhancers	**71**	**4.0**
5th pillar: Higher education and training	108	3.1
6th pillar: Goods market efficiency	56	4.4
7th pillar: Labor market efficiency	59	4.4
8th pillar: Financial market sophistication	54	4.5
9th pillar: Technological readiness	94	2.9
10th pillar: Market size	39	4.4
Innovation and sophistication factors	**64**	**3.7**
11th pillar: Business sophistication	61	4.2
12th pillar: Innovation	65	3.2

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Nigeria

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	4.2	86
Intellectual property protection	2.9	96
Diversion of public funds	2.4	119
Public trust of politicians	1.5	127
Judicial independence	4.3	57
Favoritism in decisions of government officials	2.1	125
Wastefulness of government spending	2.6	118
Burden of government regulation	3.4	57
Efficiency of legal framework	3.5	72
Transparency of government policymaking	4.2	54
Business costs of terrorism	4.6	118
Business costs of crime and violence	3.1	124
Organized crime	3.7	123
Reliability of police services	2.8	120
Ethical behavior of firms	3.8	95
Strength of auditing and reporting standards	4.4	82
Efficacy of corporate boards	4.8	61
Protection of minority shareholders' interests	4.8	56
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.4	114
Quality of roads	2.3	116
Quality of railroad infrastructure	1.4	108
Quality of port infrastructure	2.6	120
Quality of air transport infrastructure	4.2	84
Available seat kilometers per week (millions)*	213.0	55
Quality of electricity supply	1.6	132
Main telephone lines (per 100 population)*	1.3	116
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	5.6	15
National savings rate (% GDP)*	44.9	9
Inflation (%)*	5.5	68
Interest rate spread (%)*	6.7	85
Government gross debt (% GDP)*	n/a	n/a
4th pillar: Health and primary education		
Business impact of malaria	4.5	113
Malaria incidence (cases per 100,000 population)*	2,026.6	112
Business impact of tuberculosis	5.1	91
Tuberculosis incidence (cases per 100,000 population)*	311.0	117
Business impact of HIV/AIDS	5.0	79
HIV prevalence (% adult population)*	3.1	120
Infant mortality (deaths per 1,000 live births)*	101.0	127
Life expectancy at birth (years)*	48.0	128
Quality of primary education	3.1	88
Primary education enrollment (net rate, %)*	63.4	125
Education expenditure (% GNI)*	0.9	127
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	32.4	118
Tertiary education enrollment (gross rate, %)*	10.2	104
Quality of the educational system	3.7	60
Quality of math and science education	3.9	77
Quality of management schools	4.2	59
Internet access in schools	2.4	104
Local availability of research and training services	4.2	52
Extent of staff training	3.6	88

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	5.4	36
Extent of market dominance	3.9	62
Effectiveness of anti-monopoly policy	3.9	65
Extent and effect of taxation	4.0	39
Total tax rate (% profits)*	29.9	19
Number of procedures required to start a business*	9.0	58
Number of days required to start a business*	34.0	80
Agricultural policy costs	4.1	56
Prevalence of trade barriers	4.4	83
Trade-weighted tariff rate (% duty)*	13.0	118
Prevalence of foreign ownership	5.6	40
Business impact of rules on FDI	5.4	57
Burden of customs procedures	2.7	123
Degree of customer orientation	4.7	63
Buyer sophistication	3.7	61
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.5	67
Flexibility of wage determination	5.5	37
Non-wage labor costs (% worker's salary)*	9.0	28
Rigidity of Employment Index (0–100, 100 is worst)*	7.0	8
Hiring and firing practices	5.2	10
Firing costs (in weeks of wages)*	50.0	80
Pay and productivity	4.0	86
Reliance on professional management	5.0	50
Brain drain	2.5	112
Female-to-male participation ratio in labor force*	0.5	112
8th pillar: Financial market sophistication		
Financial market sophistication	4.1	75
Financing through local equity market	5.7	3
Ease of access to loans	2.3	118
Venture capital availability	2.8	84
Restriction on capital flows	4.1	93
Strength of Investor Protection (0–10, 10 is best)*	5.7	39
Soundness of banks	5.2	87
Regulation of securities exchanges	5.0	53
Strength of Legal Rights (0–10, 10 is best)*	7.0	16
9th pillar: Technological readiness		
Availability of latest technologies	4.2	81
Firm-level technology absorption	4.6	75
Laws relating to ICT	3.9	65
FDI and technology transfer	4.9	69
Mobile telephone subscribers (per 100 population)*	24.1	104
Internet users (per 100 population)*	6.0	100
Personal computers (per 100 population)*	0.9	117
Broadband internet subscribers (per 100 population)	0.0	124
10th pillar: Market size		
Domestic market size index*	4.2	41
Foreign market size index*	5.2	31
11th pillar: Business sophistication		
Local supplier quantity	4.8	65
Local supplier quality	4.7	60
State of cluster development	3.9	39
Nature of competitive advantage	3.7	47
Value chain breadth	3.1	98
Control of international distribution	4.5	39
Production process sophistication	3.3	80
Extent of marketing	4.5	64
Willingness to delegate authority	4.2	60
12th pillar: Innovation		
Capacity for innovation	3.4	47
Quality of scientific research institutions	3.6	83
Company spending on R&D	3.8	33
University-industry research collaboration	3.0	80
Gov't procurement of advanced tech products	2.7	125
Availability of scientists and engineers	4.7	36
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

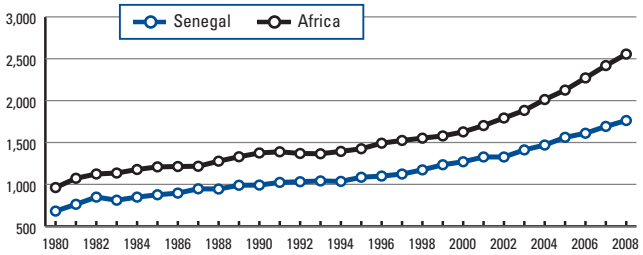
Senegal

Key indicators

Population (millions), 2008	12.7
GDP (US$ billions), 2007	11.2
GDP (PPP) per capita (int'l $), 2007	1,692.3
Sectoral value-added (% GDP), 2007	
Agriculture	14.7
Industry	22.1
Services	63.2
Human Development Index, 2006	
Score (0–1, 1 is best)	0.50
Rank (out of 179 economies)	153

Source: UNFPA, IMF, EIU, World Bank, UNDP.

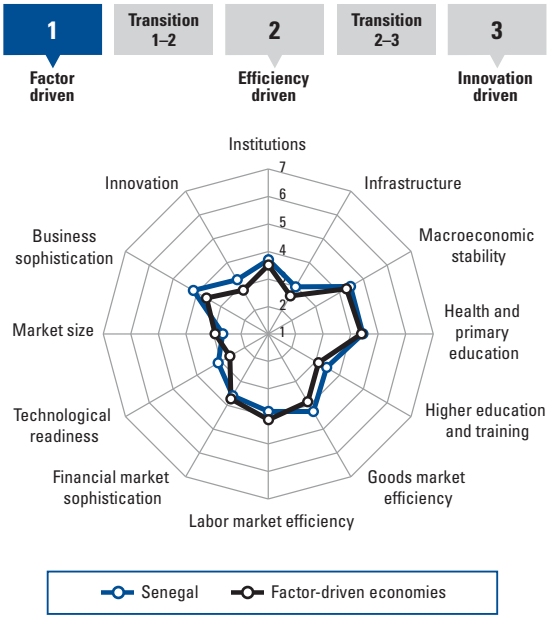
GDP (PPP) per capita (int'l $), 1980–2008



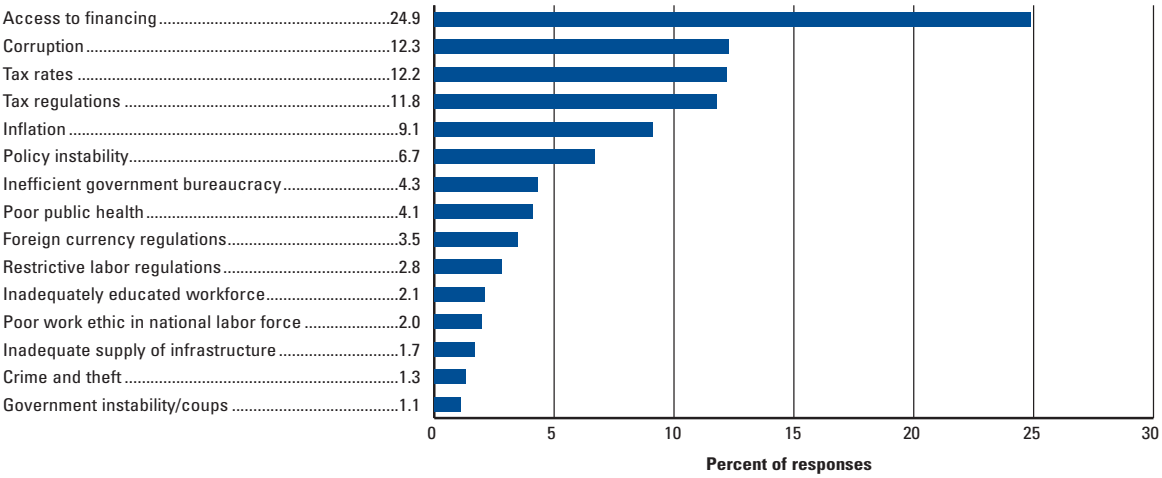
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**96**	**3.7**
GCI 2007–2008 (out of 131)	100	3.6
GCI 2006–2007 (out of 122)	n/a	n/a
Basic requirements	**101**	**3.9**
1st pillar: Institutions	83	3.7
2nd pillar: Infrastructure	83	3.0
3rd pillar: Macroeconomic stability	103	4.4
4th pillar: Health and primary education	109	4.4
Efficiency enhancers	**96**	**3.5**
5th pillar: Higher education and training	92	3.4
6th pillar: Goods market efficiency	60	4.3
7th pillar: Labor market efficiency	120	3.8
8th pillar: Financial market sophistication	111	3.6
9th pillar: Technological readiness	81	3.1
10th pillar: Market size	105	2.7
Innovation and sophistication factors	**59**	**3.7**
11th pillar: Business sophistication	65	4.2
12th pillar: Innovation	59	3.3

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Senegal

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	4.4	76
Intellectual property protection	3.5	65
Diversion of public funds	2.3	122
Public trust of politicians	2.2	88
Judicial independence	2.6	117
Favoritism in decisions of government officials	2.4	114
Wastefulness of government spending	3.1	91
Burden of government regulation	3.1	80
Efficiency of legal framework	3.1	89
Transparency of government policymaking	3.2	118
Business costs of terrorism	6.3	32
Business costs of crime and violence	5.2	51
Organized crime	5.5	56
Reliability of police services	5.1	36
Ethical behavior of firms	4.0	71
Strength of auditing and reporting standards	3.9	102
Efficacy of corporate boards	4.6	79
Protection of minority shareholders' interests	4.9	47
2nd pillar: Infrastructure		
Quality of overall infrastructure	3.3	77
Quality of roads	3.2	78
Quality of railroad infrastructure	1.7	93
Quality of port infrastructure	3.8	73
Quality of air transport infrastructure	4.8	59
Available seat kilometers per week (millions)*	137.3	69
Quality of electricity supply	2.5	118
Main telephone lines (per 100 population)*	2.4	112
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–5.5	123
National savings rate (% GDP)*	32.1	24
Inflation (%)*	5.9	73
Interest rate spread (%)*	11.5	118
Government gross debt (% GDP)*	19.4	24
4th pillar: Health and primary education		
Business impact of malaria	4.6	112
Malaria incidence (cases per 100,000 population)*	10,829.7	124
Business impact of tuberculosis	4.9	99
Tuberculosis incidence (cases per 100,000 population)*	270.0	113
Business impact of HIV/AIDS	4.9	83
HIV prevalence (% adult population)*	1.0	101
Infant mortality (deaths per 1,000 live births)*	77.0	114
Life expectancy at birth (years)*	59.0	111
Quality of primary education	4.0	56
Primary education enrollment (net rate, %)*	70.7	120
Education expenditure (% GNI)*	4.6	50
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	23.8	127
Tertiary education enrollment (gross rate, %)*	5.5	114
Quality of the educational system	3.8	59
Quality of math and science education	4.5	50
Quality of management schools	4.9	29
Internet access in schools	3.6	57
Local availability of research and training services	4.7	30
Extent of staff training	3.3	110

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	5.4	35
Extent of market dominance	4.7	29
Effectiveness of anti-monopoly policy	3.6	75
Extent and effect of taxation	3.2	87
Total tax rate (% profits)*	46.0	73
Number of procedures required to start a business*	10.0	75
Number of days required to start a business*	58.0	109
Agricultural policy costs	4.0	59
Prevalence of trade barriers	4.1	108
Trade-weighted tariff rate (% duty)*	9.8	98
Prevalence of foreign ownership	5.4	55
Business impact of rules on FDI	5.3	66
Burden of customs procedures	3.5	78
Degree of customer orientation	5.8	7
Buyer sophistication	2.5	126
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.9	33
Flexibility of wage determination	3.9	119
Non-wage labor costs (% worker's salary)*	21.0	89
Rigidity of Employment Index (0–100, 100 is worst)*	61.0	118
Hiring and firing practices	4.2	43
Firing costs (in weeks of wages)*	38.0	69
Pay and productivity	3.5	113
Reliance on professional management	3.9	107
Brain drain	2.1	128
Female-to-male participation ratio in labor force*	0.7	81
8th pillar: Financial market sophistication		
Financial market sophistication	3.5	93
Financing through local equity market	3.3	104
Ease of access to loans	1.8	133
Venture capital availability	2.1	127
Restriction on capital flows	4.1	97
Strength of Investor Protection (0–10, 10 is best)*	3.0	118
Soundness of banks	6.2	33
Regulation of securities exchanges	3.8	100
Strength of Legal Rights (0–10, 10 is best)*	3.0	93
9th pillar: Technological readiness		
Availability of latest technologies	5.3	39
Firm-level technology absorption	5.6	19
Laws relating to ICT	3.8	70
FDI and technology transfer	4.7	84
Mobile telephone subscribers (per 100 population)*	25.0	103
Internet users (per 100 population)*	5.4	103
Personal computers (per 100 population)*	2.1	102
Broadband internet subscribers (per 100 population)	0.2	89
10th pillar: Market size		
Domestic market size index*	2.6	100
Foreign market size index*	2.9	114
11th pillar: Business sophistication		
Local supplier quantity	5.1	38
Local supplier quality	4.9	48
State of cluster development	3.5	69
Nature of competitive advantage	3.1	90
Value chain breadth	3.8	58
Control of international distribution	4.8	16
Production process sophistication	3.1	86
Extent of marketing	4.7	57
Willingness to delegate authority	3.3	111
12th pillar: Innovation		
Capacity for innovation	3.0	78
Quality of scientific research institutions	3.9	64
Company spending on R&D	3.0	68
University-industry research collaboration	3.1	71
Gov't procurement of advanced tech products	4.2	24
Availability of scientists and engineers	4.6	37
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

South Africa

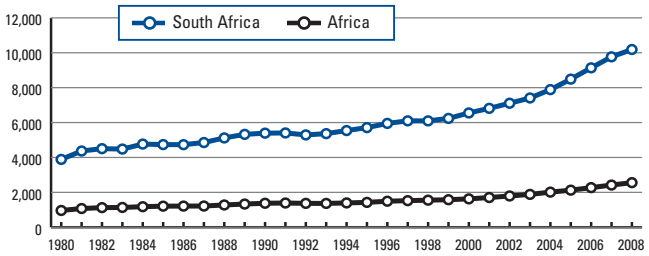
Key indicators

Population (millions), 2008 ..... 48.8
GDP (US$ billions), 2007 ..... 283.1
GDP (PPP) per capita (int'l $), 2007 ..... 9,767.5
Sectoral value-added (% GDP), 2007
- Agriculture 2.7
- Industry 30.9
- Services 66.4

Human Development Index, 2006
- Score (0–1, 1 is best) 0.67
- Rank (out of 179 economies) 125

Source: UNFPA, IMF, EIU, World Bank, UNDP.

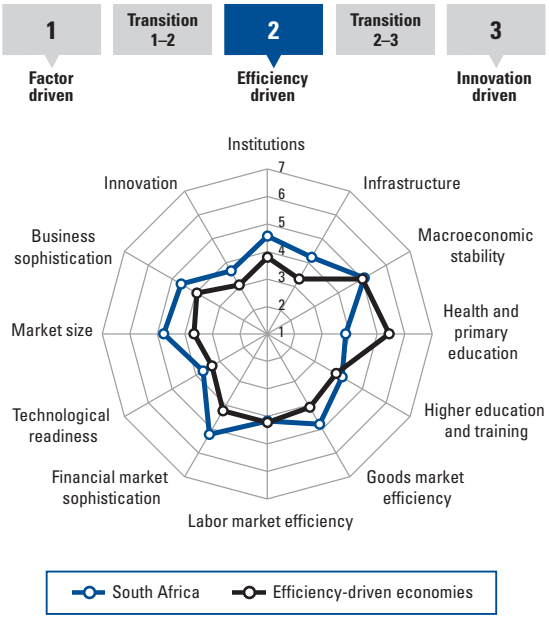
GDP (PPP) per capita (int'l $), 1980–2008



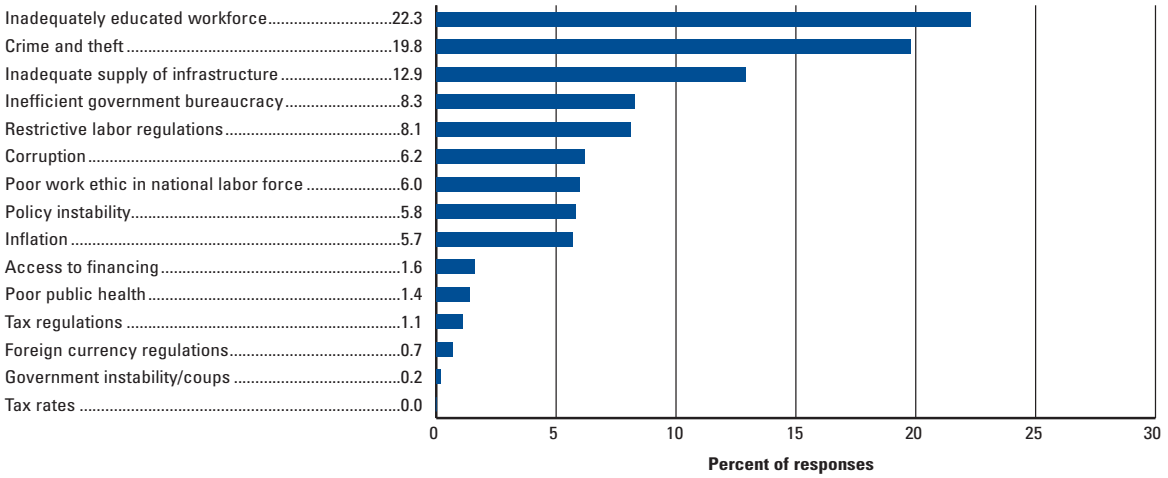
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**45**	**4.4**
GCI 2007–2008 (out of 131)	44	4.4
GCI 2006–2007 (out of 122)	35	4.5
Basic requirements	**69**	**4.4**
1st pillar: Institutions	46	4.6
2nd pillar: Infrastructure	48	4.2
3rd pillar: Macroeconomic stability	63	5.1
4th pillar: Health and primary education	122	3.8
Efficiency enhancers	**35**	**4.5**
5th pillar: Higher education and training	57	4.1
6th pillar: Goods market efficiency	31	4.8
7th pillar: Labor market efficiency	88	4.2
8th pillar: Financial market sophistication	24	5.2
9th pillar: Technological readiness	49	3.7
10th pillar: Market size	23	4.8
Innovation and sophistication factors	**36**	**4.1**
11th pillar: Business sophistication	33	4.6
12th pillar: Innovation	37	3.6

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

South Africa

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	6.0	20
Intellectual property protection	5.3	23
Diversion of public funds	4.1	49
Public trust of politicians	3.2	50
Judicial independence	5.2	30
Favoritism in decisions of government officials	3.4	50
Wastefulness of government spending	4.1	29
Burden of government regulation	2.8	95
Efficiency of legal framework	5.2	20
Transparency of government policymaking	4.9	29
Business costs of terrorism	6.2	36
Business costs of crime and violence	1.8	134
Organized crime	3.6	126
Reliability of police services	3.1	109
Ethical behavior of firms	4.6	42
Strength of auditing and reporting standards	6.2	4
Efficacy of corporate boards	5.6	8
Protection of minority shareholders' interests	5.6	13
2nd pillar: Infrastructure		
Quality of overall infrastructure	4.5	46
Quality of roads	4.8	40
Quality of railroad infrastructure	3.5	37
Quality of port infrastructure	4.4	49
Quality of air transport infrastructure	5.9	25
Available seat kilometers per week (millions)*	1,081.5	21
Quality of electricity supply	3.4	101
Main telephone lines (per 100 population)*	9.9	91
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	0.8	47
National savings rate (% GDP)*	14.1	102
Inflation (%)*	7.1	91
Interest rate spread (%)*	4.0	45
Government gross debt (% GDP)*	31.3	54
4th pillar: Health and primary education		
Business impact of malaria	5.4	95
Malaria incidence (cases per 100,000 population)*	29.0	85
Business impact of tuberculosis	3.6	129
Tuberculosis incidence (cases per 100,000 population)*	940.0	134
Business impact of HIV/AIDS	2.2	133
HIV prevalence (% adult population)*	18.1	132
Infant mortality (deaths per 1,000 live births)*	51.0	101
Life expectancy at birth (years)*	51.0	121
Quality of primary education	2.8	104
Primary education enrollment (net rate, %)*	88.3	97
Education expenditure (% GNI)*	5.3	32
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	94.7	44
Tertiary education enrollment (gross rate, %)*	15.4	93
Quality of the educational system	2.8	110
Quality of math and science education	2.2	132
Quality of management schools	5.0	25
Internet access in schools	2.8	91
Local availability of research and training services	4.7	29
Extent of staff training	5.1	15

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	5.1	59
Extent of market dominance	4.6	33
Effectiveness of anti-monopoly policy	5.5	13
Extent and effect of taxation	4.5	25
Total tax rate (% profits)*	37.1	45
Number of procedures required to start a business*	8.0	44
Number of days required to start a business*	31.0	70
Agricultural policy costs	4.8	12
Prevalence of trade barriers	5.0	43
Trade-weighted tariff rate (% duty)*	6.2	75
Prevalence of foreign ownership	5.4	58
Business impact of rules on FDI	5.0	77
Burden of customs procedures	4.0	58
Degree of customer orientation	4.5	78
Buyer sophistication	4.5	28
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	3.7	119
Flexibility of wage determination	3.5	123
Non-wage labor costs (% worker's salary)*	4.0	14
Rigidity of Employment Index (0–100, 100 is worst)*	42.0	81
Hiring and firing practices	2.3	129
Firing costs (in weeks of wages)*	24.0	39
Pay and productivity	4.0	81
Reliance on professional management	5.7	16
Brain drain	3.1	72
Female-to-male participation ratio in labor force*	0.6	103
8th pillar: Financial market sophistication		
Financial market sophistication	6.3	12
Financing through local equity market	5.7	4
Ease of access to loans	4.2	31
Venture capital availability	3.9	29
Restriction on capital flows	3.7	111
Strength of Investor Protection (0–10, 10 is best)*	8.0	9
Soundness of banks	6.5	15
Regulation of securities exchanges	6.1	5
Strength of Legal Rights (0–10, 10 is best)*	5.0	52
9th pillar: Technological readiness		
Availability of latest technologies	5.4	37
Firm-level technology absorption	5.5	32
Laws relating to ICT	4.8	34
FDI and technology transfer	5.2	38
Mobile telephone subscribers (per 100 population)*	83.3	48
Internet users (per 100 population)*	7.8	95
Personal computers (per 100 population)*	8.4	68
Broadband internet subscribers (per 100 population)	0.7	77
10th pillar: Market size		
Domestic market size index*	4.6	22
Foreign market size index*	5.1	36
11th pillar: Business sophistication		
Local supplier quantity	5.1	43
Local supplier quality	5.4	24
State of cluster development	3.9	40
Nature of competitive advantage	3.4	72
Value chain breadth	3.5	75
Control of international distribution	4.5	37
Production process sophistication	4.2	43
Extent of marketing	5.6	15
Willingness to delegate authority	4.8	22
12th pillar: Innovation		
Capacity for innovation	3.8	36
Quality of scientific research institutions	4.7	31
Company spending on R&D	4.0	28
University-industry research collaboration	4.2	28
Gov't procurement of advanced tech products	3.6	63
Availability of scientists and engineers	3.4	110
USPTO utility patents (per million population)*	1.7	39

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

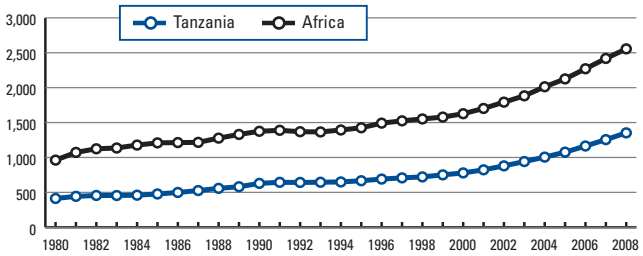
Tanzania

Key indicators

Population (millions), 2008	41.5
GDP (US$ billions), 2007	16.7
GDP (PPP) per capita (int'l $), 2007	1,255.6
Sectoral value-added (% GDP), 2006	
Agriculture	45.3
Industry	17.4
Services	37.3
Human Development Index, 2006	
Score (0–1, 1 is best)	0.50
Rank (out of 179 economies)	152

Source: UNFPA, IMF, EIU, World Bank, UNDP.

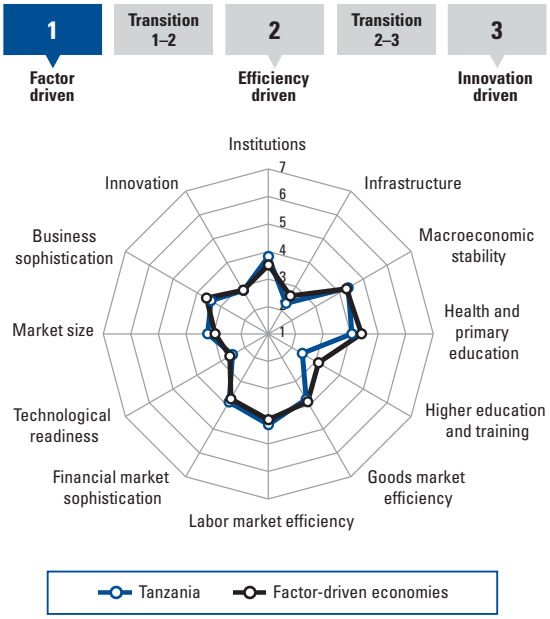
GDP (PPP) per capita (int'l $), 1980–2008



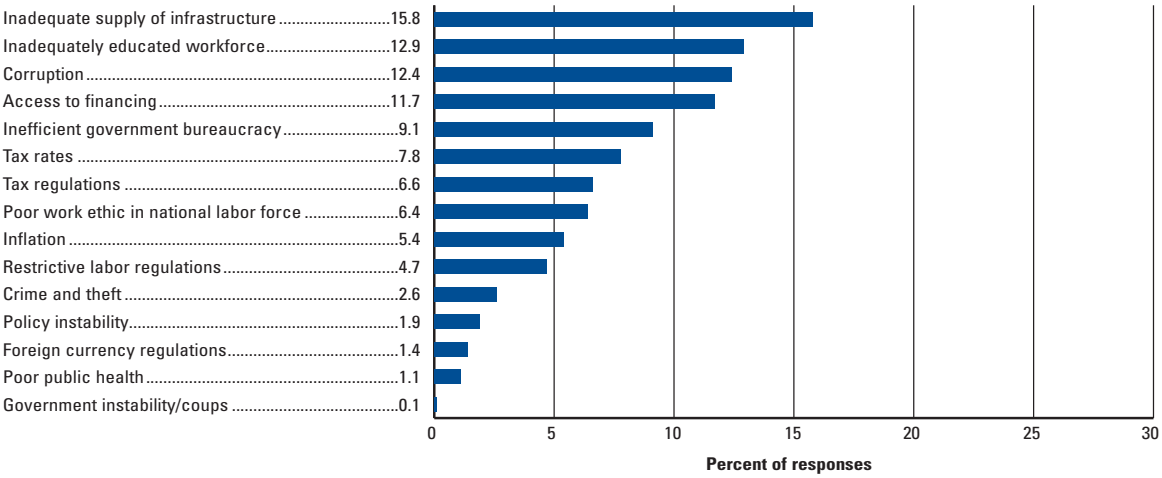
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**113**	**3.5**
GCI 2007–2008 (out of 131)	104	3.6
GCI 2006–2007 (out of 122)	97	3.6
Basic requirements	**114**	**3.6**
1st pillar: Institutions	76	3.8
2nd pillar: Infrastructure	118	2.3
3rd pillar: Macroeconomic stability	108	4.3
4th pillar: Health and primary education	117	4.0
Efficiency enhancers	**108**	**3.3**
5th pillar: Higher education and training	132	2.4
6th pillar: Goods market efficiency	111	3.7
7th pillar: Labor market efficiency	73	4.3
8th pillar: Financial market sophistication	94	3.9
9th pillar: Technological readiness	117	2.5
10th pillar: Market size	80	3.2
Innovation and sophistication factors	**106**	**3.1**
11th pillar: Business sophistication	109	3.4
12th pillar: Innovation	101	2.8

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Tanzania

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	3.8	100
Intellectual property protection	2.9	101
Diversion of public funds	2.9	103
Public trust of politicians	2.8	60
Judicial independence	3.9	66
Favoritism in decisions of government officials	3.0	76
Wastefulness of government spending	3.6	56
Burden of government regulation	3.4	56
Efficiency of legal framework	3.4	78
Transparency of government policymaking	4.0	74
Business costs of terrorism	5.7	64
Business costs of crime and violence	4.4	86
Organized crime	5.6	51
Reliability of police services	4.3	70
Ethical behavior of firms	3.9	80
Strength of auditing and reporting standards	4.4	87
Efficacy of corporate boards	4.8	64
Protection of minority shareholders' interests	4.2	85
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.4	112
Quality of roads	2.5	109
Quality of railroad infrastructure	1.9	79
Quality of port infrastructure	2.8	113
Quality of air transport infrastructure	3.5	111
Available seat kilometers per week (millions)*	54.9	87
Quality of electricity supply	2.3	122
Main telephone lines (per 100 population)*	0.4	129
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–4.5	117
National savings rate (% GDP)*	8.6	128
Inflation (%)*	7.0	89
Interest rate spread (%)*	7.3	92
Government gross debt (% GDP)*	19.7	25
4th pillar: Health and primary education		
Business impact of malaria	3.3	127
Malaria incidence (cases per 100,000 population)*	28,470.4	133
Business impact of tuberculosis	3.8	127
Tuberculosis incidence (cases per 100,000 population)*	312.0	118
Business impact of HIV/AIDS	3.1	123
HIV prevalence (% adult population)*	6.2	126
Infant mortality (deaths per 1,000 live births)*	76.0	113
Life expectancy at birth (years)*	50.0	123
Quality of primary education	2.5	120
Primary education enrollment (net rate, %)*	97.8	22
Education expenditure (% GNI)*	2.4	112
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	6.1	134
Tertiary education enrollment (gross rate, %)*	1.5	130
Quality of the educational system	3.1	95
Quality of math and science education	2.7	125
Quality of management schools	3.0	122
Internet access in schools	1.8	128
Local availability of research and training services	3.2	107
Extent of staff training	3.5	95

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.3	111
Extent of market dominance	3.1	111
Effectiveness of anti-monopoly policy	3.4	89
Extent and effect of taxation	3.4	71
Total tax rate (% profits)*	44.3	67
Number of procedures required to start a business*	12.0	103
Number of days required to start a business*	29.0	66
Agricultural policy costs	3.8	81
Prevalence of trade barriers	4.4	78
Trade-weighted tariff rate (% duty)*	7.7	82
Prevalence of foreign ownership	5.2	68
Business impact of rules on FDI	5.5	41
Burden of customs procedures	2.7	124
Degree of customer orientation	3.8	117
Buyer sophistication	2.9	110
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.1	100
Flexibility of wage determination	4.5	102
Non-wage labor costs (% worker's salary)*	16.0	65
Rigidity of Employment Index (0–100, 100 is worst)*	63.0	121
Hiring and firing practices	3.3	98
Firing costs (in weeks of wages)*	32.0	57
Pay and productivity	3.6	106
Reliance on professional management	4.8	60
Brain drain	2.9	89
Female-to-male participation ratio in labor force*	1.0	4
8th pillar: Financial market sophistication		
Financial market sophistication	2.8	111
Financing through local equity market	3.8	88
Ease of access to loans	2.8	94
Venture capital availability	2.4	111
Restriction on capital flows	4.3	86
Strength of Investor Protection (0–10, 10 is best)*	5.0	67
Soundness of banks	5.1	94
Regulation of securities exchanges	4.0	94
Strength of Legal Rights (0–10, 10 is best)*	5.0	52
9th pillar: Technological readiness		
Availability of latest technologies	3.9	94
Firm-level technology absorption	4.0	112
Laws relating to ICT	2.8	110
FDI and technology transfer	4.6	89
Mobile telephone subscribers (per 100 population)*	14.8	116
Internet users (per 100 population)*	1.0	122
Personal computers (per 100 population)*	0.9	116
Broadband internet subscribers (per 100 population)	0.0	126
10th pillar: Market size		
Domestic market size index*	3.2	75
Foreign market size index*	3.4	98
11th pillar: Business sophistication		
Local supplier quantity	3.9	116
Local supplier quality	3.5	123
State of cluster development	3.3	79
Nature of competitive advantage	3.0	97
Value chain breadth	2.7	118
Control of international distribution	3.4	120
Production process sophistication	2.5	124
Extent of marketing	3.4	115
Willingness to delegate authority	3.8	83
12th pillar: Innovation		
Capacity for innovation	2.5	119
Quality of scientific research institutions	4.0	60
Company spending on R&D	2.6	114
University-industry research collaboration	3.0	85
Gov't procurement of advanced tech products	3.2	105
Availability of scientists and engineers	3.5	104
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

Tunisia

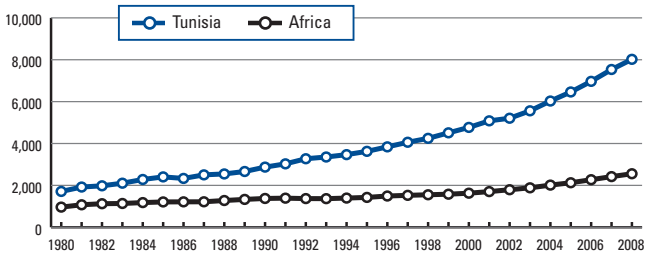
Key indicators

Population (millions), 2008 ..... 10.4
GDP (US$ billions), 2007 ..... 35.0
GDP (PPP) per capita (int'l $), 2007 ..... 7,534.6
Sectoral value-added (% GDP), 2007
- Agriculture 10.9
- Industry 27.5
- Services 61.6

Human Development Index, 2006
- Score (0–1, 1 is best) 0.76
- Rank (out of 179 economies) 95

Source: UNFPA, IMF, EIU, World Bank, UNDP.

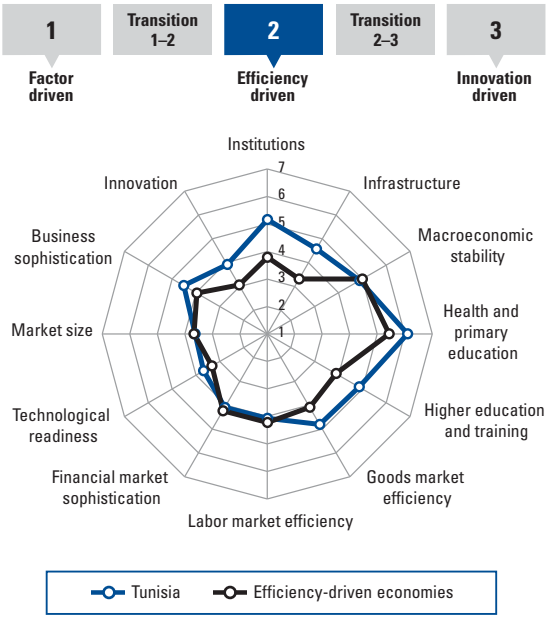
GDP (PPP) per capita (int'l $), 1980–2008



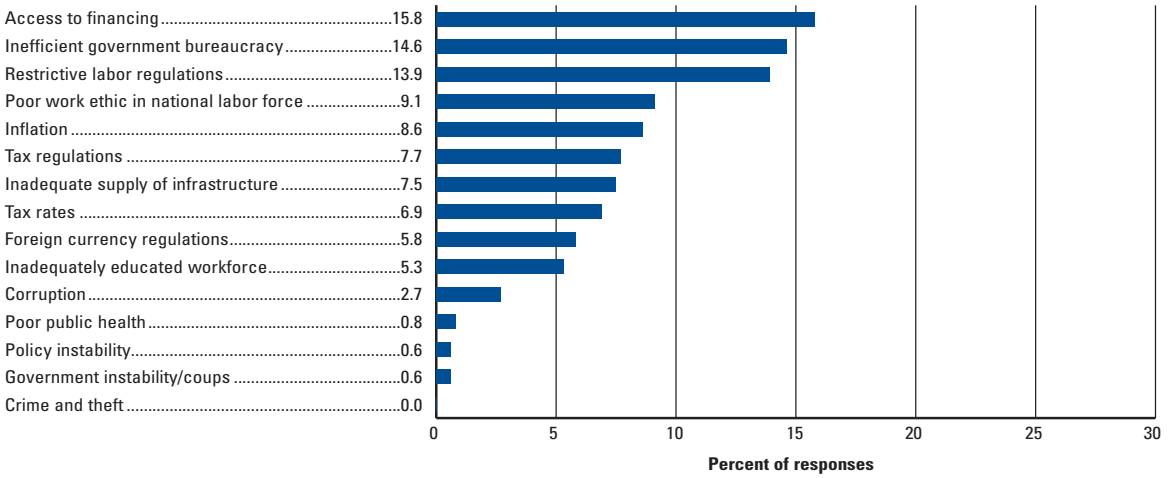
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**36**	**4.6**
GCI 2007–2008 (out of 131)	32	4.6
GCI 2006–2007 (out of 122)	33	4.6
Basic requirements	**35**	**5.2**
1st pillar: Institutions	22	5.2
2nd pillar: Infrastructure	34	4.6
3rd pillar: Macroeconomic stability	75	4.9
4th pillar: Health and primary education	27	6.1
Efficiency enhancers	**53**	**4.2**
5th pillar: Higher education and training	27	4.8
6th pillar: Goods market efficiency	30	4.8
7th pillar: Labor market efficiency	103	4.1
8th pillar: Financial market sophistication	77	4.1
9th pillar: Technological readiness	52	3.7
10th pillar: Market size	62	3.6
Innovation and sophistication factors	**30**	**4.2**
11th pillar: Business sophistication	40	4.5
12th pillar: Innovation	27	3.9

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Tunisia

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	5.6	33
Intellectual property protection	4.4	40
Diversion of public funds	5.1	24
Public trust of politicians	5.0	16
Judicial independence	5.0	39
Favoritism in decisions of government officials	4.9	14
Wastefulness of government spending	5.5	2
Burden of government regulation	4.2	16
Efficiency of legal framework	4.9	25
Transparency of government policymaking	5.2	15
Business costs of terrorism	5.9	58
Business costs of crime and violence	5.7	30
Organized crime	5.8	44
Reliability of police services	5.8	24
Ethical behavior of firms	5.0	29
Strength of auditing and reporting standards	5.2	50
Efficacy of corporate boards	4.8	62
Protection of minority shareholders' interests	5.3	30
2nd pillar: Infrastructure		
Quality of overall infrastructure	5.0	33
Quality of roads	4.9	39
Quality of railroad infrastructure	4.4	22
Quality of port infrastructure	4.8	38
Quality of air transport infrastructure	5.8	29
Available seat kilometers per week (millions)*	116.9	73
Quality of electricity supply	5.8	33
Main telephone lines (per 100 population)*	12.4	84
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–3.1	106
National savings rate (% GDP)*	22.2	67
Inflation (%)*	3.1	50
Interest rate spread (%)*	3.7	39
Government gross debt (% GDP)*	55.4	95
4th pillar: Health and primary education		
Business impact of malaria	6.6	47
Malaria incidence (cases per 100,000 population)*	0.0	1
Business impact of tuberculosis	6.4	35
Tuberculosis incidence (cases per 100,000 population)*	25.0	44
Business impact of HIV/AIDS	6.2	21
HIV prevalence (% adult population)*	0.1	23
Infant mortality (deaths per 1,000 live births)*	20.0	74
Life expectancy at birth (years)*	72.0	66
Quality of primary education	5.1	21
Primary education enrollment (net rate, %)*	96.1	45
Education expenditure (% GNI)*	6.7	14
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	84.9	74
Tertiary education enrollment (gross rate, %)*	31.0	67
Quality of the educational system	5.1	17
Quality of math and science education	5.6	7
Quality of management schools	5.3	17
Internet access in schools	4.6	34
Local availability of research and training services	4.8	28
Extent of staff training	4.8	27

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	5.4	34
Extent of market dominance	4.8	27
Effectiveness of anti-monopoly policy	5.0	24
Extent and effect of taxation	4.7	21
Total tax rate (% profits)*	61.0	108
Number of procedures required to start a business*	10.0	75
Number of days required to start a business*	11.0	19
Agricultural policy costs	5.1	4
Prevalence of trade barriers	4.8	57
Trade-weighted tariff rate (% duty)*	16.8	130
Prevalence of foreign ownership	5.3	60
Business impact of rules on FDI	5.8	16
Burden of customs procedures	4.5	37
Degree of customer orientation	5.2	28
Buyer sophistication	4.4	30
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.9	30
Flexibility of wage determination	4.1	113
Non-wage labor costs (% worker's salary)*	22.0	94
Rigidity of Employment Index (0–100, 100 is worst)*	49.0	104
Hiring and firing practices	4.1	49
Firing costs (in weeks of wages)*	17.0	28
Pay and productivity	4.3	56
Reliance on professional management	4.7	64
Brain drain	3.8	48
Female-to-male participation ratio in labor force*	0.4	126
8th pillar: Financial market sophistication		
Financial market sophistication	4.3	61
Financing through local equity market	4.6	60
Ease of access to loans	3.9	43
Venture capital availability	3.8	35
Restriction on capital flows	4.4	82
Strength of Investor Protection (0–10, 10 is best)*	3.3	112
Soundness of banks	5.3	85
Regulation of securities exchanges	5.0	50
Strength of Legal Rights (0–10, 10 is best)*	2.0	119
9th pillar: Technological readiness		
Availability of latest technologies	5.4	36
Firm-level technology absorption	5.4	34
Laws relating to ICT	4.9	30
FDI and technology transfer	5.3	27
Mobile telephone subscribers (per 100 population)*	71.9	59
Internet users (per 100 population)*	12.7	79
Personal computers (per 100 population)*	6.2	77
Broadband internet subscribers (per 100 population)	0.4	84
10th pillar: Market size		
Domestic market size index*	3.4	65
Foreign market size index*	4.3	63
11th pillar: Business sophistication		
Local supplier quantity	5.4	21
Local supplier quality	5.0	44
State of cluster development	3.8	50
Nature of competitive advantage	3.7	45
Value chain breadth	4.4	31
Control of international distribution	4.6	31
Production process sophistication	4.2	40
Extent of marketing	4.8	45
Willingness to delegate authority	4.0	72
12th pillar: Innovation		
Capacity for innovation	3.7	38
Quality of scientific research institutions	4.3	42
Company spending on R&D	3.7	38
University-industry research collaboration	3.8	35
Gov't procurement of advanced tech products	5.1	3
Availability of scientists and engineers	5.5	10
USPTO utility patents (per million population)*	0.0	88

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

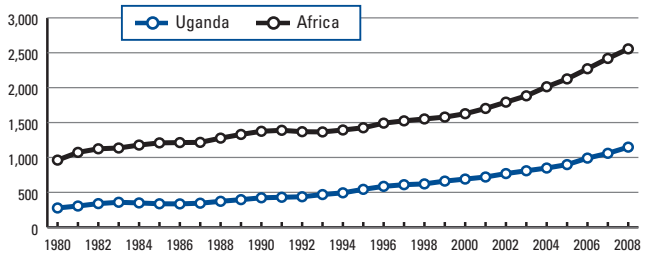
Uganda

Key indicators

Population (millions), 2008	31.9
GDP (US$ billions), 2007	11.8
GDP (PPP) per capita (int'l $), 2007	1,059.5
Sectoral value-added (% GDP), 2007	
Agriculture	29.0
Industry	18.2
Services	52.8
Human Development Index, 2006	
Score (0–1, 1 is best)	0.49
Rank (out of 179 economies)	156

Source: UNFPA, IMF, EIU, World Bank, UNDP.

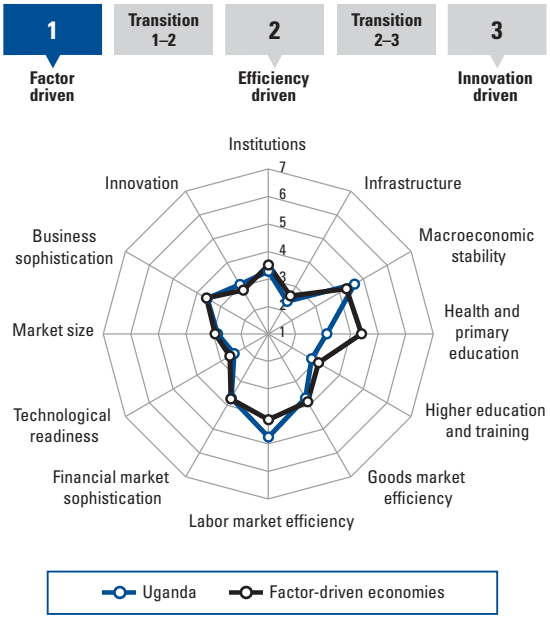
GDP (PPP) per capita (int'l $), 1980–2008



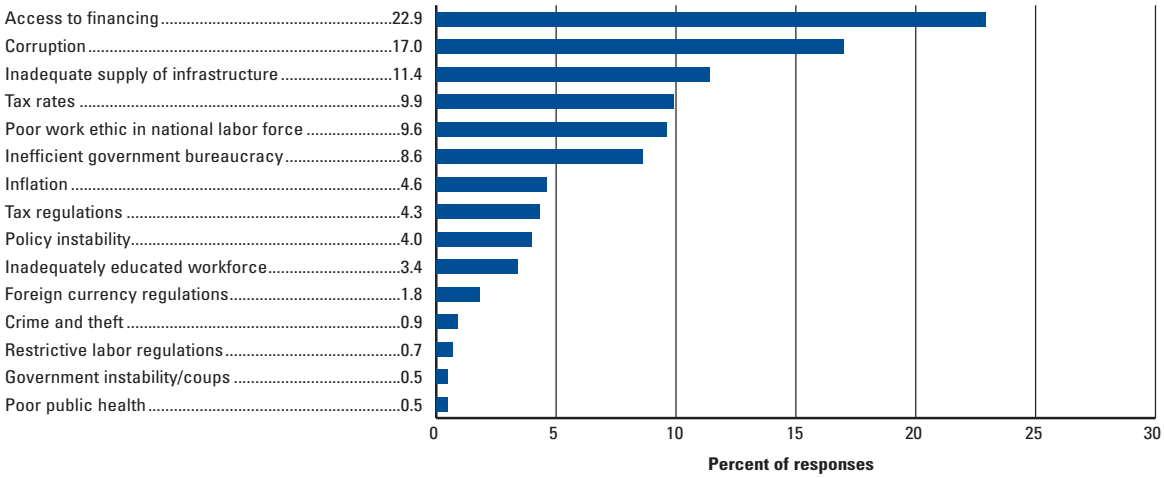
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**128**	**3.3**
GCI 2007–2008 (out of 131)	120	3.3
GCI 2006–2007 (out of 122)	108	3.4
Basic requirements	**129**	**3.3**
1st pillar: Institutions	113	3.3
2nd pillar: Infrastructure	115	2.4
3rd pillar: Macroeconomic stability	92	4.6
4th pillar: Health and primary education	133	3.1
Efficiency enhancers	**106**	**3.4**
5th pillar: Higher education and training	120	2.8
6th pillar: Goods market efficiency	114	3.7
7th pillar: Labor market efficiency	25	4.7
8th pillar: Financial market sophistication	102	3.7
9th pillar: Technological readiness	121	2.4
10th pillar: Market size	96	2.8
Innovation and sophistication factors	**90**	**3.3**
11th pillar: Business sophistication	97	3.6
12th pillar: Innovation	72	3.1

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Uganda

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	3.6	112
Intellectual property protection	2.7	112
Diversion of public funds	2.2	128
Public trust of politicians	2.0	107
Judicial independence	3.3	87
Favoritism in decisions of government officials	2.0	126
Wastefulness of government spending	2.7	114
Burden of government regulation	3.7	33
Efficiency of legal framework	3.3	80
Transparency of government policymaking	3.9	78
Business costs of terrorism	4.4	121
Business costs of crime and violence	3.9	103
Organized crime	4.4	102
Reliability of police services	3.7	92
Ethical behavior of firms	3.4	114
Strength of auditing and reporting standards	3.7	112
Efficacy of corporate boards	4.4	94
Protection of minority shareholders' interests	4.2	89
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.6	107
Quality of roads	2.5	111
Quality of railroad infrastructure	1.5	103
Quality of port infrastructure	3.8	72
Quality of air transport infrastructure	3.3	119
Available seat kilometers per week (millions)*	49.2	93
Quality of electricity supply	1.9	125
Main telephone lines (per 100 population)*	0.4	130
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–2.8	101
National savings rate (% GDP)*	24.0	59
Inflation (%)*	6.8	84
Interest rate spread (%)*	9.8	111
Government gross debt (% GDP)*	20.6	27
4th pillar: Health and primary education		
Business impact of malaria	2.9	132
Malaria incidence (cases per 100,000 population)*	44,368.0	134
Business impact of tuberculosis	3.8	126
Tuberculosis incidence (cases per 100,000 population)*	355.0	120
Business impact of HIV/AIDS	2.8	127
HIV prevalence (% adult population)*	5.4	124
Infant mortality (deaths per 1,000 live births)*	79.0	118
Life expectancy at birth (years)*	50.0	123
Quality of primary education	2.6	114
Primary education enrollment (net rate, %)*	n/a	n/a
Education expenditure (% GNI)*	4.0	74
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	18.3	129
Tertiary education enrollment (gross rate, %)*	3.5	122
Quality of the educational system	3.1	93
Quality of math and science education	3.0	111
Quality of management schools	3.4	104
Internet access in schools	2.0	125
Local availability of research and training services	4.0	62
Extent of staff training	3.4	100

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.9	69
Extent of market dominance	2.9	118
Effectiveness of anti-monopoly policy	3.6	80
Extent and effect of taxation	2.8	117
Total tax rate (% profits)*	32.3	24
Number of procedures required to start a business*	18.0	125
Number of days required to start a business*	28.0	64
Agricultural policy costs	3.4	113
Prevalence of trade barriers	4.1	109
Trade-weighted tariff rate (% duty)*	11.1	106
Prevalence of foreign ownership	6.2	7
Business impact of rules on FDI	6.0	10
Burden of customs procedures	3.1	102
Degree of customer orientation	4.1	101
Buyer sophistication	2.5	129
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.0	106
Flexibility of wage determination	6.3	2
Non-wage labor costs (% worker's salary)*	10.0	30
Rigidity of Employment Index (0–100, 100 is worst)*	3.0	4
Hiring and firing practices	5.1	12
Firing costs (in weeks of wages)*	13.0	19
Pay and productivity	3.4	118
Reliance on professional management	4.0	99
Brain drain	2.2	124
Female-to-male participation ratio in labor force*	0.9	11
8th pillar: Financial market sophistication		
Financial market sophistication	2.9	109
Financing through local equity market	3.9	84
Ease of access to loans	3.0	88
Venture capital availability	2.6	90
Restriction on capital flows	5.1	59
Strength of Investor Protection (0–10, 10 is best)*	4.0	98
Soundness of banks	4.8	109
Regulation of securities exchanges	4.2	87
Strength of Legal Rights (0–10, 10 is best)*	3.0	93
9th pillar: Technological readiness		
Availability of latest technologies	3.3	122
Firm-level technology absorption	3.6	124
Laws relating to ICT	3.0	101
FDI and technology transfer	4.9	67
Mobile telephone subscribers (per 100 population)*	6.7	125
Internet users (per 100 population)*	5.0	106
Personal computers (per 100 population)*	1.7	109
Broadband internet subscribers (per 100 population)	0.0	119
10th pillar: Market size		
Domestic market size index*	2.8	90
Foreign market size index*	2.9	116
11th pillar: Business sophistication		
Local supplier quantity	4.8	67
Local supplier quality	3.9	108
State of cluster development	3.3	84
Nature of competitive advantage	3.2	85
Value chain breadth	3.0	107
Control of international distribution	3.7	101
Production process sophistication	2.2	131
Extent of marketing	2.9	125
Willingness to delegate authority	3.5	106
12th pillar: Innovation		
Capacity for innovation	3.0	75
Quality of scientific research institutions	4.3	41
Company spending on R&D	2.6	111
University-industry research collaboration	3.3	61
Gov't procurement of advanced tech products	3.4	86
Availability of scientists and engineers	4.0	77
USPTO utility patents (per million population)*	0.0	88

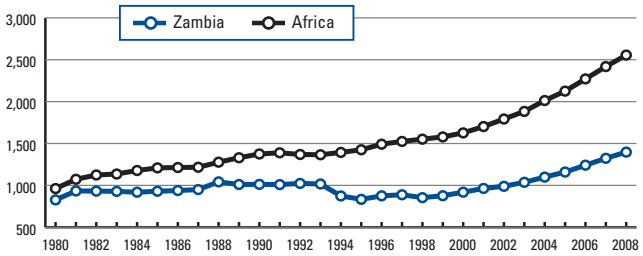
Zambia

Key indicators

Population (millions), 2008	12.2
GDP (US$ billions), 2007	11.4
GDP (PPP) per capita (int'l $), 2007	1,323.1
Sectoral value-added (% GDP), 2007	
Agriculture	21.6
Industry	38.2
Services	40.2
Human Development Index, 2006	
Score (0–1, 1 is best)	0.45
Rank (out of 179 economies)	163

Source: UNFPA, IMF, EIU, World Bank, UNDP.

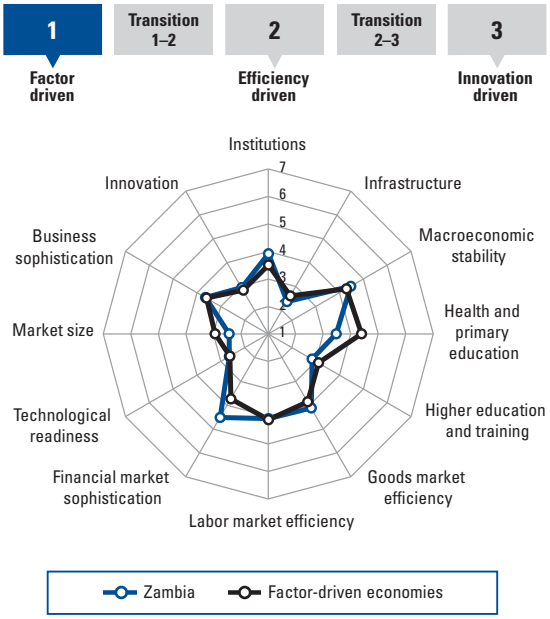
GDP (PPP) per capita (int'l $), 1980–2008



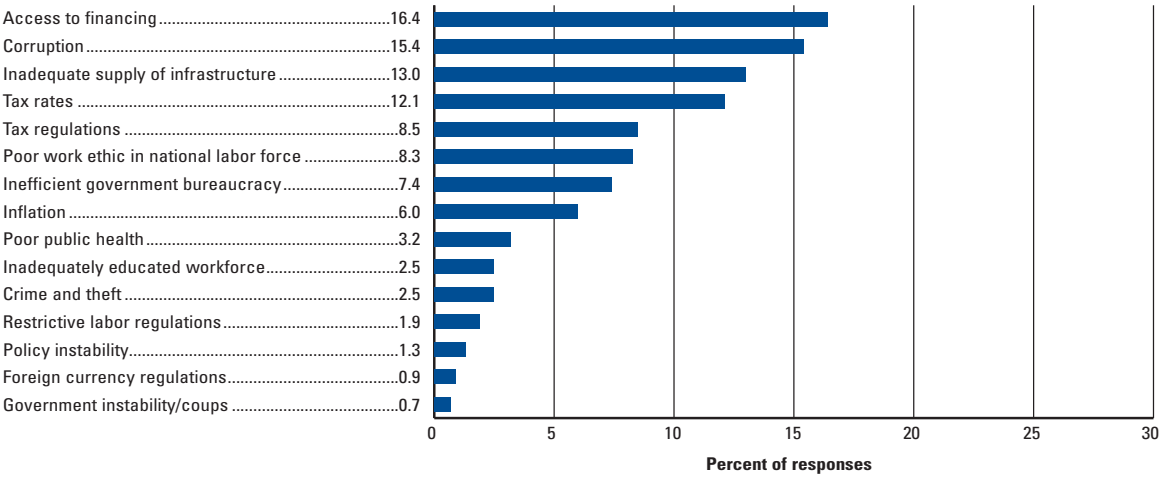
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**112**	**3.5**
GCI 2007–2008 (out of 131)	122	3.3
GCI 2006–2007 (out of 122)	118	3.2
Basic requirements	**121**	**3.5**
1st pillar: Institutions	67	3.9
2nd pillar: Infrastructure	116	2.4
3rd pillar: Macroeconomic stability	102	4.5
4th pillar: Health and primary education	128	3.5
Efficiency enhancers	**100**	**3.4**
5th pillar: Higher education and training	118	2.8
6th pillar: Goods market efficiency	78	4.1
7th pillar: Labor market efficiency	102	4.1
8th pillar: Financial market sophistication	55	4.5
9th pillar: Technological readiness	106	2.6
10th pillar: Market size	112	2.4
Innovation and sophistication factors	**93**	**3.3**
11th pillar: Business sophistication	93	3.6
12th pillar: Innovation	92	2.9

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Zambia

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	4.7	65
Intellectual property protection	3.4	72
Diversion of public funds	2.9	105
Public trust of politicians	2.3	81
Judicial independence	3.5	82
Favoritism in decisions of government officials	2.6	103
Wastefulness of government spending	2.9	99
Burden of government regulation	3.8	28
Efficiency of legal framework	3.7	59
Transparency of government policymaking	4.7	35
Business costs of terrorism	6.2	34
Business costs of crime and violence	4.3	92
Organized crime	5.7	47
Reliability of police services	4.1	78
Ethical behavior of firms	4.1	64
Strength of auditing and reporting standards	4.8	65
Efficacy of corporate boards	4.8	56
Protection of minority shareholders' interests	4.5	70
2nd pillar: Infrastructure		
Quality of overall infrastructure	2.3	118
Quality of roads	2.5	107
Quality of railroad infrastructure	1.7	92
Quality of port infrastructure	3.8	71
Quality of air transport infrastructure	3.7	99
Available seat kilometers per week (millions)*	29.8	104
Quality of electricity supply	2.9	112
Main telephone lines (per 100 population)*	0.8	122
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–1.8	84
National savings rate (% GDP)*	25.3	52
Inflation (%)*	10.7	119
Interest rate spread (%)*	9.7	110
Government gross debt (% GDP)*	28.0	45
4th pillar: Health and primary education		
Business impact of malaria	3.4	126
Malaria incidence (cases per 100,000 population)*	18,431.1	128
Business impact of tuberculosis	3.3	130
Tuberculosis incidence (cases per 100,000 population)*	553.0	129
Business impact of HIV/AIDS	2.5	129
HIV prevalence (% adult population)*	15.2	129
Infant mortality (deaths per 1,000 live births)*	104.0	129
Life expectancy at birth (years)*	43.0	132
Quality of primary education	3.0	93
Primary education enrollment (net rate, %)*	92.0	72
Education expenditure (% GNI)*	2.2	115
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	30.4	120
Tertiary education enrollment (gross rate, %)*	2.3	128
Quality of the educational system	3.6	69
Quality of math and science education	3.4	96
Quality of management schools	3.8	81
Internet access in schools	2.1	119
Local availability of research and training services	3.5	97
Extent of staff training	3.4	106

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	4.5	103
Extent of market dominance	3.3	97
Effectiveness of anti-monopoly policy	3.5	84
Extent and effect of taxation	2.8	113
Total tax rate (% profits)*	16.1	4
Number of procedures required to start a business*	6.0	19
Number of days required to start a business*	33.0	77
Agricultural policy costs	4.2	47
Prevalence of trade barriers	5.0	41
Trade-weighted tariff rate (% duty)*	11.6	108
Prevalence of foreign ownership	6.0	13
Business impact of rules on FDI	5.8	20
Burden of customs procedures	3.2	98
Degree of customer orientation	4.3	92
Buyer sophistication	3.1	97
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.4	70
Flexibility of wage determination	5.4	40
Non-wage labor costs (% worker's salary)*	9.0	28
Rigidity of Employment Index (0–100, 100 is worst)*	34.0	57
Hiring and firing practices	4.5	28
Firing costs (in weeks of wages)*	178.0	124
Pay and productivity	3.6	109
Reliance on professional management	4.9	53
Brain drain	2.3	121
Female-to-male participation ratio in labor force*	0.7	73
8th pillar: Financial market sophistication		
Financial market sophistication	3.6	92
Financing through local equity market	4.6	63
Ease of access to loans	2.9	90
Venture capital availability	2.5	100
Restriction on capital flows	5.6	28
Strength of Investor Protection (0–10, 10 is best)*	5.3	50
Soundness of banks	5.6	67
Regulation of securities exchanges	5.1	44
Strength of Legal Rights (0–10, 10 is best)*	6.0	29
9th pillar: Technological readiness		
Availability of latest technologies	4.0	91
Firm-level technology absorption	4.2	102
Laws relating to ICT	3.3	90
FDI and technology transfer	4.8	77
Mobile telephone subscribers (per 100 population)*	14.0	117
Internet users (per 100 population)*	4.2	112
Personal computers (per 100 population)*	1.1	114
Broadband internet subscribers (per 100 population)	0.0	112
10th pillar: Market size		
Domestic market size index*	2.4	111
Foreign market size index*	2.6	123
11th pillar: Business sophistication		
Local supplier quantity	4.3	106
Local supplier quality	4.0	99
State of cluster development	3.5	65
Nature of competitive advantage	3.2	84
Value chain breadth	2.7	117
Control of international distribution	3.4	116
Production process sophistication	2.5	121
Extent of marketing	3.9	89
Willingness to delegate authority	3.6	100
12th pillar: Innovation		
Capacity for innovation	2.6	105
Quality of scientific research institutions	3.8	72
Company spending on R&D	2.7	99
University-industry research collaboration	3.0	86
Gov't procurement of advanced tech products	3.0	107
Availability of scientists and engineers	4.2	64
USPTO utility patents (per million population)*	0.0	88

Zimbabwe

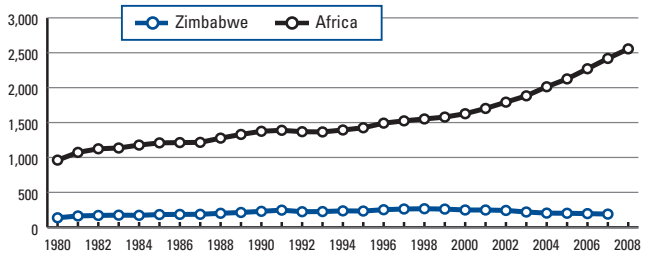
Key indicators

Population (millions), 2008 ..... 13.5
GDP (US$ billions), 2007 ..... 4.7
GDP (PPP) per capita (int'l $), 2007 ..... 188.4
Sectoral value-added (% GDP), 2005
- Agriculture 19.1
- Industry 23.9
- Services 57.0

Human Development Index, 2006
- Score (0–1, 1 is best) ..... n/a
- Rank (out of 179 economies) ..... n/a

Source: UNFPA, IMF, EIU, World Bank, UNDP.

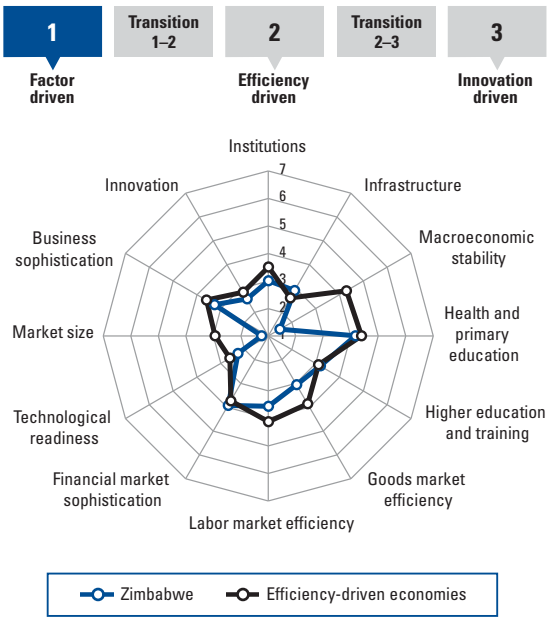
GDP (PPP) per capita (int'l $), 1980–2008



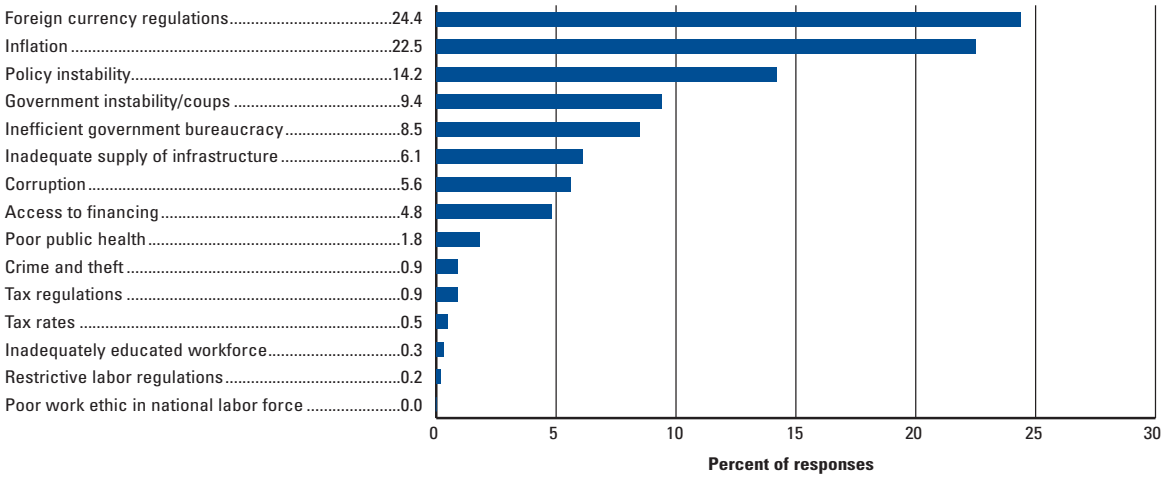
Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
GCI 2008–2009	**133**	**2.9**
GCI 2007–2008 (out of 131)	129	2.9
GCI 2006–2007 (out of 122)	112	3.3
Basic requirements	**134**	**2.9**
1st pillar: Institutions	126	3.0
2nd pillar: Infrastructure	88	2.9
3rd pillar: Macroeconomic stability	134	1.5
4th pillar: Health and primary education	113	4.2
Efficiency enhancers	**131**	**2.9**
5th pillar: Higher education and training	107	3.2
6th pillar: Goods market efficiency	133	3.1
7th pillar: Labor market efficiency	127	3.6
8th pillar: Financial market sophistication	90	3.9
9th pillar: Technological readiness	129	2.3
10th pillar: Market size	133	1.2
Innovation and sophistication factors	**122**	**2.9**
11th pillar: Business sophistication	124	3.3
12th pillar: Innovation	119	2.5

Stage of development



The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Zimbabwe

The Global Competitiveness Index in detail

INDICATOR	SCORE	RANK/134
1st pillar: Institutions		
Property rights	2.1	134
Intellectual property protection	2.9	100
Diversion of public funds	2.2	126
Public trust of politicians	1.4	132
Judicial independence	2.0	128
Favoritism in decisions of government officials	1.9	131
Wastefulness of government spending	1.7	133
Burden of government regulation	2.3	124
Efficiency of legal framework	2.1	130
Transparency of government policymaking	3.5	107
Business costs of terrorism	5.9	53
Business costs of crime and violence	3.9	102
Organized crime	5.5	55
Reliability of police services	2.2	131
Ethical behavior of firms	3.5	111
Strength of auditing and reporting standards	5.2	48
Efficacy of corporate boards	5.0	44
Protection of minority shareholders' interests	4.8	57
2nd pillar: Infrastructure		
Quality of overall infrastructure	3.2	79
Quality of roads	3.3	76
Quality of railroad infrastructure	2.9	56
Quality of port infrastructure	4.3	55
Quality of air transport infrastructure	3.4	117
Available seat kilometers per week (millions)*	17.2	116
Quality of electricity supply	1.8	129
Main telephone lines (per 100 population)*	2.6	111
3rd pillar: Macroeconomic stability		
Central government balance (% GDP)*	–24.6	133
National savings rate (% GDP)*	16.9	91
Inflation (%)*	10,452.6	134
Interest rate spread (%)*	75.0	132
Government gross debt (% GDP)*	n/a	n/a
4th pillar: Health and primary education		
Business impact of malaria	4.3	115
Malaria incidence (cases per 100,000 population)*	9,797.5	121
Business impact of tuberculosis	3.2	132
Tuberculosis incidence (cases per 100,000 population)*	557.0	131
Business impact of HIV/AIDS	2.3	131
HIV prevalence (% adult population)*	15.3	130
Infant mortality (deaths per 1,000 live births)*	60.0	109
Life expectancy at birth (years)*	43.0	132
Quality of primary education	3.7	71
Primary education enrollment (net rate, %)*	87.8	102
Education expenditure (% GNI)*	6.9	12
5th pillar: Higher education and training		
Secondary education enrollment (gross rate, %)*	40.0	114
Tertiary education enrollment (gross rate, %)*	3.6	119
Quality of the educational system	4.1	43
Quality of math and science education	3.8	81
Quality of management schools	3.5	102
Internet access in schools	2.0	122
Local availability of research and training services	2.9	121
Extent of staff training	3.9	67

INDICATOR	SCORE	RANK/134
6th pillar: Goods market efficiency		
Intensity of local competition	3.4	130
Extent of market dominance	3.3	94
Effectiveness of anti-monopoly policy	3.2	108
Extent and effect of taxation	2.2	131
Total tax rate (% profits)*	53.0	100
Number of procedures required to start a business*	10.0	75
Number of days required to start a business*	96.0	121
Agricultural policy costs	1.6	134
Prevalence of trade barriers	3.4	130
Trade-weighted tariff rate (% duty)*	13.0	117
Prevalence of foreign ownership	3.2	133
Business impact of rules on FDI	2.1	134
Burden of customs procedures	2.6	125
Degree of customer orientation	3.4	129
Buyer sophistication	3.0	107
7th pillar: Labor market efficiency		
Cooperation in labor-employer relations	4.0	107
Flexibility of wage determination	2.7	132
Non-wage labor costs (% worker's salary)*	4.0	14
Rigidity of Employment Index (0–100, 100 is worst)*	33.0	56
Hiring and firing practices	2.5	128
Firing costs (in weeks of wages)*	446.0	126
Pay and productivity	3.3	123
Reliance on professional management	5.4	30
Brain drain	1.7	133
Female-to-male participation ratio in labor force*	0.8	67
8th pillar: Financial market sophistication		
Financial market sophistication	3.7	84
Financing through local equity market	5.1	27
Ease of access to loans	3.0	80
Venture capital availability	2.6	94
Restriction on capital flows	1.5	134
Strength of Investor Protection (0–10, 10 is best)*	4.3	86
Soundness of banks	4.5	122
Regulation of securities exchanges	4.7	67
Strength of Legal Rights (0–10, 10 is best)*	6.0	29
9th pillar: Technological readiness		
Availability of latest technologies	3.2	126
Firm-level technology absorption	3.7	120
Laws relating to ICT	2.9	107
FDI and technology transfer	3.3	134
Mobile telephone subscribers (per 100 population)*	6.5	126
Internet users (per 100 population)*	9.3	89
Personal computers (per 100 population)*	6.6	75
Broadband internet subscribers (per 100 population)	0.1	101
10th pillar: Market size		
Domestic market size index*	1.0	134
Foreign market size index*	2.0	132
11th pillar: Business sophistication		
Local supplier quantity	3.7	123
Local supplier quality	3.5	121
State of cluster development	2.7	116
Nature of competitive advantage	2.6	124
Value chain breadth	2.3	131
Control of international distribution	3.5	113
Production process sophistication	2.3	130
Extent of marketing	3.4	114
Willingness to delegate authority	4.1	69
12th pillar: Innovation		
Capacity for innovation	2.1	132
Quality of scientific research institutions	3.4	98
Company spending on R&D	2.8	88
University-industry research collaboration	2.8	94
Gov't procurement of advanced tech products	2.3	133
Availability of scientists and engineers	3.2	120
USPTO utility patents (per million population)*	0.1	76

* Hard data

Note: For descriptions of variables and detailed sources, please refer to "How to Read the Competitiveness Profiles."

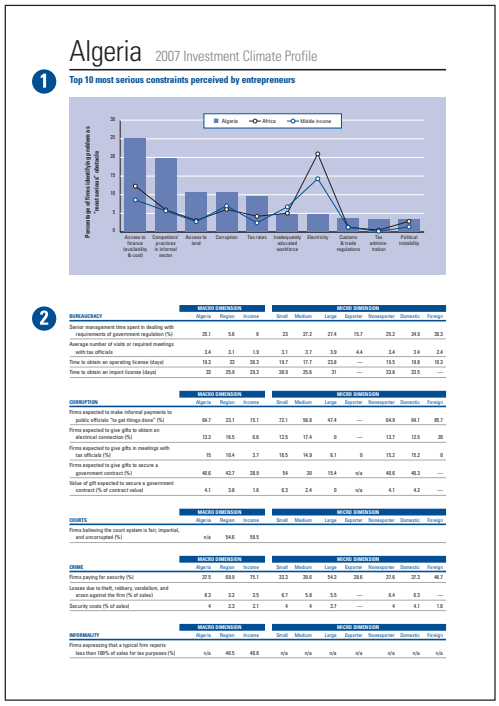
2.2

Investment Climate Profiles

How to Read the Investment Climate Profiles

GIOVANNI TANZILLO, The World Bank

The World Bank's Enterprise Surveys are establishment-level surveys designed to analyze the investment climates of the participating countries and to advise them on reforms aimed at fostering growth and employment. Standard Enterprise Surveys collect both perceptions and objective indicators of the business environment in each country and are administered to the manufacturing and service sectors in three to four urban areas. The data are collected through face-to-face interviews with hundreds of entrepreneurs and cover major investment climate topics, ranging from infrastructure and access to finance to corruption and crime. Detailed productivity information includes firm finances, costs such as labor and materials, sales, and investment. The breadth and depth of data allow across country analysis by firm attributes (size, ownership, export orientation, industry), and can probe the relationship between investment climate characteristics and firm productivity. Every year, surveys are implemented in 15–30 countries, with updates planned for each country every three to five years. Panel data are also available for some countries that have been surveyed more than once. So far, over 110 countries have been surveyed, including over 20,000 entrepreneurs, senior managers, and CEOs in 39 African countries. The average sample size of the firms surveyed in Africa is approximately 400 observations.



1 Top 10 most serious constraints perceived by entrepreneurs

This chart summarizes the top 10 "most serious" impediments to the operation and growth of their businesses as perceived by senior managers or entrepreneurs. Respondents were given a list of 15 factors and asked to identify the most serious obstacle affecting the operation and growth of their establishment. Each bar in the graph shows the share of surveyed senior managers or entrepreneurs that ranked as "most serious" the following constraints: access to finance (availability and cost); access to land; business licensing and permits; corruption; courts; crime, theft, and disorder; customs and trade regulations; electricity; inadequately educated workforce; labor regulations; political instability; competitors' practices in the informal sector; tax administration; tax rates; and transportation of goods, supplies, and inputs. The graph also shows the rankings' comparison both at regional and income levels.

2 Investment climate indicators

The investment climate indicators in the country profiles are shown by macro dimension (country, region, and income)[1] and by micro dimension (small, medium, large, exporter, nonexporter, domestic ownership, and foreign ownership).[2]

Following is a description of the indicators reported:

BUREAUCRACY

- Senior management time spent in dealing with requirements of government regulation (%)

  This indicator provides the average percentage of senior management's time that is spent in a typical week dealing with requirements imposed by government regulations (e.g., taxes, customs, labor regulations, licensing and registration), including dealings with officials, completing forms, and so on.

- Average number of visits or required meetings with tax officials

  This is the average number of visits or required meetings with tax officials.

- Time to obtain an operating license (days)
  This is the average wait, in days, experienced to obtain an operating license from the day the establishment applied for it to the day it was granted.
- Time to obtain an import license (days)
  This is the average wait, in days, experienced to obtain an import license from the day the establishment applied for it to the day it was granted.

CORRUPTION

- Firms expected to make informal payments to public officials "to get things done" (%)
  This indicator shows the percentage of firms expected to make informal payments or to give gifts to public officials to "get things done" with regard to customs, taxes, licenses, regulations, services, and so on.
- Firms expected to give gifts to obtain an electrical connection (%)
  These numbers show the percentage of firms for which a gift or informal payment was expected or requested in order to obtain an electrical connection.
- Firms expected to give gifts in meetings with tax officials (%)
  These numbers show the percentage of firms for which a gift or informal payment was expected or requested in inspections or meetings with tax officials.
- Firms expected to give gifts to secure a government contract (%)
  These numbers show the percentage of firms making informal payments or giving gifts to public officials to secure a contract with the government.
- Value of gift expected to secure a government contract (% of contract value)
  This indicator shows the percentage of contract value paid as gift or informal payment to secure a government contract.

COURTS

- Firms believing the court system is fair, impartial and uncorrupted (%)
  This indicator shows the percentage of firms that agree with the statement "the court system is fair, impartial, and uncorrupted."

CRIME

- Firms paying for security (%)
  These figures indicate the percentage of firms paying for security (i.e., equipment, personnel, or professional security services).
- Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)
  These numbers provide firms' estimated losses, as a percentage of total annual sales, due to theft, robbery, vandalism, or arson.
- Security costs (% of sales)
  This indicator shows firms' estimated costs, as a percentage of total sales, of providing security (equipment, personnel, or professional security service).

INFORMALITY

- Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)
  These numbers show the percentage of firms expressing that a typical firm reports less than 100 percent of its sales for tax purposes.

GENDER

- Firms with female participation in ownership (%)
  This indicator shows the percentage of firms that include women among the owners.

FINANCE

- Firms with lines of credit or loans from financial institutions (%)
  These numbers provide the percentage of firms with lines of credit or loans from financial institution.
- Internal finance for investment (%)
  These figures show the percentage of firms' new investments that are financed by internal funds or retained earnings.
- Bank finance for investment (%)
  These figures show the percentage of firms' new investments that are financed by commercial bank credit or loan.
- Owners' contribution, new equity shares (%)
  This indicator shows the percentage of firms' new investments that are financed by owners' contribution or by issue of new equity shares.
- Informal finance for investment (%)
  This indicator provides the percentage of firms' new investments that are financed by informal sources (moneylenders, friends, relatives, and so on).
- Suppliers/customers credit financing (%)
  These numbers show the percentage of establishment's working capital that is financed with credit from suppliers or customers.
- Loans requiring collateral (%)
  These figures provide the percentage of firms that provide collateral for loans.

- Value of collateral needed for a loan (% of the loan amount)
  This indicator provides the average value of the collateral required on the most recent line of credit or loan as a percentage of the loan value or the value of the line of credit.
- Firms with annual financial statement reviewed by external auditor (%)
  This indicator shows the percentage of firms with annual financial statements reviewed by an external auditor.

INFRASTRUCTURE

- Number of power outages in a typical month
  This indicator provides the average number of times in a month the establishment experienced power outages or surges from the public grid.
- Value lost due to power outages (% of sales)
  This indicator provides the estimated losses over the course of a year resulting from interruptions in electricity service, as a percentage of sales.
- Delay in obtaining an electrical connection (days)
  These numbers show the average wait, in days, experienced to obtain electrical connection from the day the establishment applied for it to the day it received the service.
- Delay in obtaining a mainline telephone connection (days)
  This indicator shows the average wait, in days, experienced to obtain a mainline telephone connection from the day the establishment applied for it to the day it received the service.
- Products shipped to supply domestic markets lost due to breakage or spoilage (%)
  These figures provide the products shipped to supply domestic markets and lost while in transit due to breakage or spoilage as percentage of consignment value.
- Firms using the Web in interaction with clients/suppliers (%)
  This indicator shows the percentage of firms using the Web in interactions with clients and/or suppliers.

INNOVATION

- Firms with internationally recognized quality certification (%)
  These numbers show the percentage of firms that have an internationally recognized quality certification (ISO 9000, 9002, or 14000).
- Firms using technology licensed from foreign companies (%)
  These numbers show the percentage of firms using technology licensed from foreign companies.

WORKFORCE

- Firms offering formal training (%)
  This indicator shows the percentage of firms offering formal training programs for their permanent, full-time employees.
- Employees receiving formal training (%)
  This indicator provides the percentage of permanent, full-time employees receiving formal training.
- Experience of the top manager in the sector (years)
  This indicator shows the top manager's years of experience in the sector.

TRADE

- Average time to clear direct exports through customs (days)
  This indicator shows the average number of days to clear direct exports through customs.
- Average time to claim imports from customs (days)
  This indicator shows the average number of days to claim imports from customs.
- Exporter firms (%)
  This indicator shows the percentage of firms that export either directly or indirectly.
- Firms using material inputs and/or supplies of foreign origin (%)
  This indicator provides the percentage of firms that use material inputs and/or supplies of foreign origin.

Notes

1 Region: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Congo, Côte d'Ivoire, Democratic Republic of Congo, Egypt, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Swaziland, Tanzania, Uganda, and Zambia.

2 Size: *Small:* firms with less than 20 employees; *Medium:* firms with 20 or more employees and less than 50 employees; *Large:* firms with 50 or more employees.

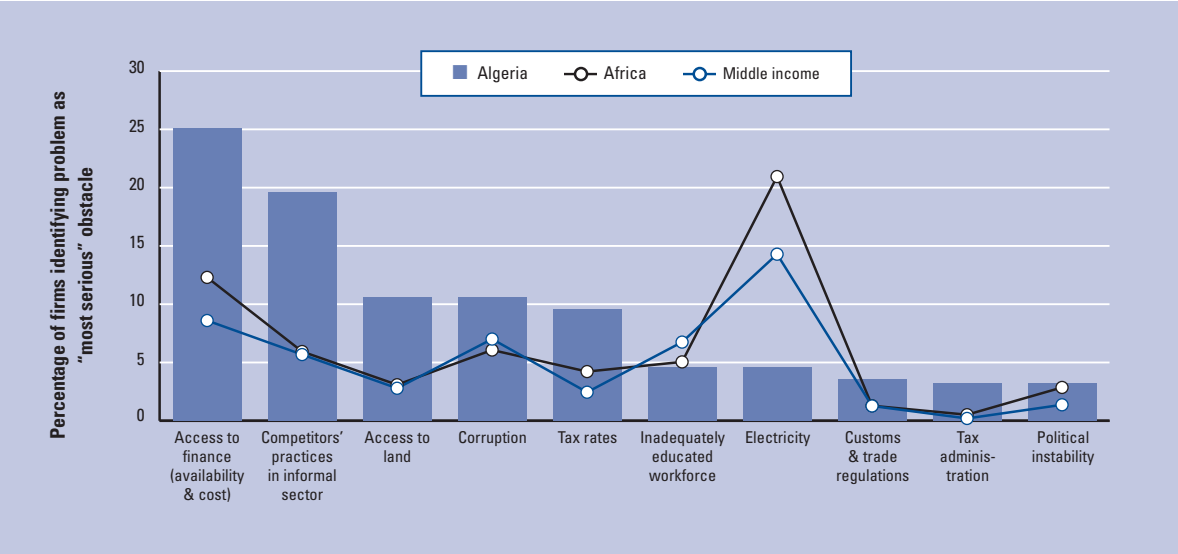
Market orientation: *Exporters:* firms with 10 percent or more of sales exported directly; *Nonexporters:* firms with less than 10 percent of sales exported directly.

Ownership status: *Domestic:* firms with less than 10 percent of capital share owned by the foreign private sector; *Foreign:* firms with 10 percent or more of capital share owned by the foreign private sector.

List of Countries: Investment Climate Profiles

Algeria 2007 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Algeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	25.1	5.6	6	23	27.2	27.4	15.7	25.2	24.9	30.3
Average number of visits or required meetings with tax officials	3.4	3.1	1.9	3.1	3.7	3.9	4.4	3.4	3.4	2.4
Time to obtain an operating license (days)	19.3	23	30.3	19.7	17.7	23.8	—	19.5	19.8	10.3
Time to obtain an import license (days)	33	25.9	29.3	38.9	25.6	31	—	33.8	33.5	—

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Algeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	64.7	23.1	15.1	72.1	58.8	47.4	—	64.9	64.1	85.7
Firms expected to give gifts to obtain an electrical connection (%)	13.2	16.5	6.6	12.5	17.4	0	—	13.7	12.5	20
Firms expected to give gifts in meetings with tax officials (%)	15	10.4	3.7	16.5	14.9	6.1	0	15.2	15.2	0
Firms expected to give gifts to secure a government contract (%)	40.6	42.7	28.9	54	30	15.4	n/a	40.6	40.3	—
Value of gift expected to secure a government contract (% of contract value)	4.1	3.8	1.6	6.3	2.4	0	n/a	4.1	4.2	—

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Algeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	n/a	54.6	59.5							

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Algeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	37.5	69.9	75.1	33.3	39.6	54.3	28.6	37.6	37.3	46.7
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	6.3	3.2	2.5	6.7	5.8	5.5	—	6.4	6.3	—
Security costs (% of sales)	4	2.3	2.1	4	4	3.7	—	4	4.1	1.6

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Algeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	n/a	46.5	40.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Algeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	15	25.9	22.9	14.7	14.9	17.8	28.6	14.9	14.9	14.3

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Algeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	31.1	26	30.2	16.3	44.4	65.1	14.3	31.3	30.6	46.7
Internal finance for investment (%)	74.5	73.7	68.7	79.7	76.3	48.3	n/a	74.5	75.4	58.9
Bank finance for investment (%)	12.3	19.6	25	6.4	13.3	30.2	n/a	12.3	12	20.6
Owners' contribution, new equity shares (%)	2.9	0.2	0.1	4.5	1.5	2.6	n/a	2.9	2.8	5.6
Informal finance for investment (%)	4	3.1	2.6	4.6	3.1	4.8	n/a	4	3.7	5.6
Suppliers/customers credit financing (%)	8.3	19.6	21.5	8.3	8.2	8.5	0	8.4	8.4	6.3
Loans requiring collateral (%)	79	73.6	72	68	81	92.3	n/a	79	78.2	100
Value of collateral needed for a loan (% of the loan amount)	173.8	109.2	103.5	200	172.4	135	n/a	173.8	177.5	125
Firms with annual financial statement reviewed by external auditor (%)	12	60.1	70.8	10.1	12.6	22.2	0	12.2	11.8	21.4

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Algeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	5.1	6.8	2.5	5.2	4.9	5.5	2.7	5.1	5.1	5.8
Value lost due to power outages (% of sales)	4	4	1.7	3.8	4.5	2.3	—	4	4.1	—
Delay in obtaining an electrical connection (days)	49.1	21.7	17.3	40.3	49.7	87	—	50.8	47.4	64.8
Delay in obtaining a mainline telephone connection (days)	40.8	25	23.7	45.6	41.2	23.4	—	41	42.2	19.4
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.3	1.4	1.4	1.4	1.4	0.6	—	1.3	1.3	1.2
Firms using the Web in interaction with clients/suppliers (%)	33.1	28.6	35.3	23	40.9	60.9	57.1	32.8	32.1	73.3

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Algeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	5	20.7	25.3	3.2	6.5	11.4	0	5	4.8	13.3
Firms using technology licensed from foreign companies (%)	13.5	12.3	12.4	11.7	14.9	13.6	—	13.6	13.4	20

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Algeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	17.3	34.8	36.4	9.8	18.1	40.9	—	17.2	16.5	50
Employees receiving formal training (%)	27.1	60.8	62.1	27.8	25.8	29.9	—	27.4	26.4	35.5
Experience of the top manager in the sector (years)	19.2	13.2	13.8	18.8	19	22.8	14.6	19.2	19.3	15.2

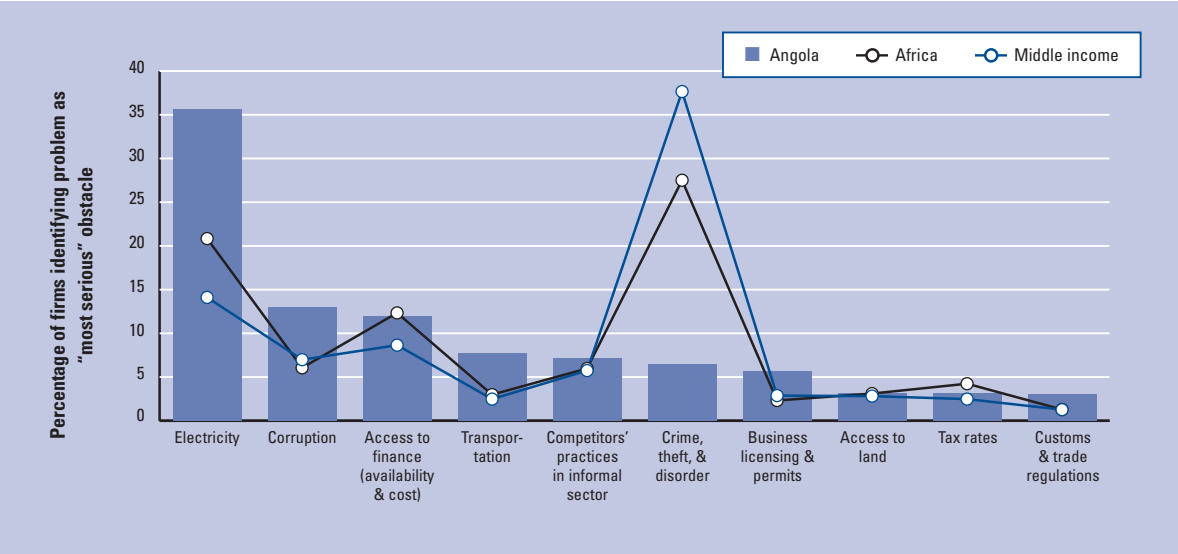
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Algeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	14.1	5	4.6	—	17.8	10.5	12.9	14.7	14	—
Average time to claim imports from customs (days)	16.8	7.1	6.1	16.8	16.6	17.4	n/a	16.8	17	11.6
Exporter firms (%)	5.2	15.5	18.2	2.2	5	26.1	100	4	4.6	26.7
Firms using material inputs and/or supplies of foreign origin (%)	71.8	41.1	39	63.2	74.1	93	—	71.6	71.5	80

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Angola 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Angola	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	7.1	5.7	6.1	6.8	8.2	13.8	—	7.1	6.9	8.4
Average number of visits or required meetings with tax officials	5.2	3.1	1.9	4.7	6.9	6.5	2	5.2	5.3	4.7
Time to obtain an operating license (days)	24.1	23	30.3	23.1	23.6	—	—	24.4	21.5	34.5
Time to obtain an import license (days)	24.3	26	29.4	25.6	18.8	—	—	24.3	21.5	30.5

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Angola	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	46.8	23.1	15	48.2	38.6	50	19	47.1	48.4	37.5
Firms expected to give gifts to obtain an electrical connection (%)	12.9	16.5	6.5	13.4	9.9	—	—	13	12.7	13.4
Firms expected to give gifts in meetings with tax officials (%)	14.8	10.4	3.7	13.1	17.6	50	19	14.8	14.2	17.6
Firms expected to give gifts to secure a government contract (%)	38.5	42.8	28.6	40.4	27	—	39.7	38.4	39.2	34
Value of gift expected to secure a government contract (% of contract value)	3.4	3.8	1.5	3.4	3.3	—	1.8	3.4	3.5	3

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Angola	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	31.9	54.7	59.7	31.3	34.8	33.3	81	31.3	28.6	50.7

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Angola	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	47.7	69.9	75.1	43.7	68.3	66.7	60.3	47.5	43.6	71.5
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	2.4	3.2	2.5	2.6	1.8	n/a	n/a	2.4	2.4	2.5
Security costs (% of sales)	3.6	2.3	2.1	3.8	2.8	—	—	3.6	3.6	3.5

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Angola	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	67.8	46.4	40.6	70.4	53.3	66.7	81	67.7	67.2	71.3

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Angola	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	23.4	25.9	22.9	21.9	32.2	20	19	23.4	22.2	30.1

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Angola	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	4.1	26.1	30.4	2.2	8.2	66.7	19	4	3.2	9.6
Internal finance for investment (%)	88.5	73.7	68.6	91.5	79.1	75	—	88.4	90.5	75.3
Bank finance for investment (%)	4	19.7	25.1	2.6	6.3	20	—	4	2.3	15
Owners' contribution, new equity shares (%)	0	0.2	0.1	0	0	0	—	0	0	0
Informal finance for investment (%)	6.4	3.1	2.6	5.2	12.4	0	—	6.4	6.5	5.6
Suppliers/customers credit financing (%)	10.7	19.6	21.5	8.7	21.9	15	16	10.7	10	14.6
Loans requiring collateral (%)	93.4	73.6	72.1	100	100	—	—	93.1	100	80.6
Value of collateral needed for a loan (% of the loan amount)	99.6	109.4	103.8	55.2	47.8	—	—	99.6	118.7	—
Firms with annual financial statement reviewed by external auditor (%)	7.7	60.2	70.9	4.9	18.6	50	0	7.8	5.9	18.1

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Angola	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	7.8	6.7	2.5	7.6	8.5	13.5	—	7.8	8	6.9
Value lost due to power outages (% of sales)	3.7	4	1.7	3.8	2.9	4.8	—	3.7	3.7	3.1
Delay in obtaining an electrical connection (days)	60.2	21.4	16.7	45	168.9	—	—	60.6	66.8	33.6
Delay in obtaining a mainline telephone connection (days)	41.8	25	23.7	44	34.4	—	—	42	43.4	37.3
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.4	1.4	1.4	1.1	2.8	1.8	n/a	1.4	1.1	4.7
Firms using the Web in interaction with clients/suppliers (%)	9.4	28.7	35.4	10	3.2	33.3	19	9.3	9	11.9

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Angola	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	5.1	20.7	25.3	3.7	9.6	33.3	20.6	4.9	3	17
Firms using technology licensed from foreign companies (%)	6	12.4	12.4	3.3	12.8	50	n/a	6	3.5	34.1

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Angola	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	19.4	34.8	36.4	14.6	34.1	83.3	n/a	19.4	16.7	50
Employees receiving formal training (%)	46	60.8	62.1	39.3	62.4	n/a	n/a	46	42.7	63.4
Experience of the top manager in the sector (years)	8	13.2	13.9	7.6	9.1	15.8	5.6	8	7.6	10.2

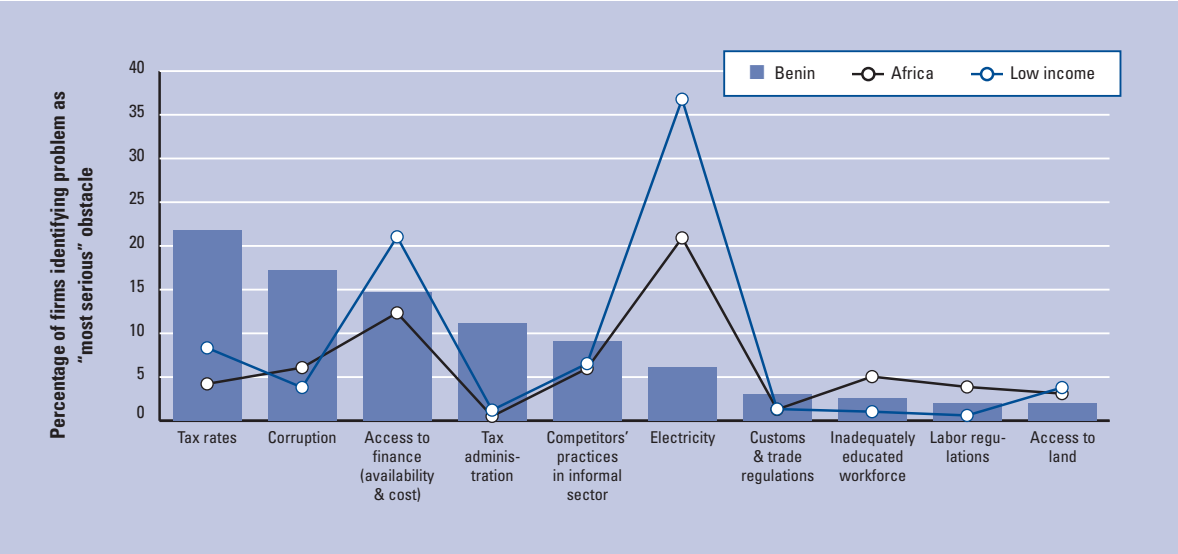
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Angola	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	16.5	5	4.6	—	—	n/a	—	—	—	—
Average time to claim imports from customs (days)	28.2	7.1	6.1	22.4	28.3	48.4	n/a	28.2	24.9	44.1
Exporter firms (%)	2.4	15.5	18.2	2.4	2.8	0	100	1.4	1.4	8.7
Firms using material inputs and/or supplies of foreign origin (%)	68.2	41.1	39	64.4	87	83.3	n/a	68.2	66.9	83.1

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Benin 2004 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Benin	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	6.5	5.7	4.7	5.4	7.4	12.7	10.5	5.6	6.2	7.8
Average number of visits or required meetings with tax officials	6.3	3.1	4.6	4.8	8.5	12	12.1	4.5	4.7	14.2
Time to obtain an operating license (days)	39.9	23	19.2	34.8	27.2	89.8	28.4	44.6	43	24.4
Time to obtain an import license (days)	41.3	25.9	19.9	53.2	25.5	30.4	46.7	39.8	45.9	26.7

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Benin	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	57.6	23.1	43.7	60	55.6	42.9	46.4	60.3	58.5	53.6
Firms expected to give gifts to obtain an electrical connection (%)	37.6	16.4	25.4	32.5	56	33.3	40.9	35.9	37.4	38.9
Firms expected to give gifts in meetings with tax officials (%)	21.2	10.4	19.6	19.3	32.3	15.8	27.3	19	20.9	22.6
Firms expected to give gifts to secure a government contract (%)	75.4	42.6	50.1	78.5	75	55.6	65.5	77.9	76.9	67.9
Value of gift expected to secure a government contract (% of contract value)	8.2	3.8	5	8.6	8.6	5.1	6.7	8.6	8.6	6.4

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Benin	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	n/a	54.6	42.8							

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Benin	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	n/a	69.8	57.5	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	0.3	3.2	5.8	0.3	0.5	0.6	0.1	0.4	0.4	0.3
Security costs (% of sales)	0.8	2.3	2.9	1	0.5	0.3	0.4	0.9	0.9	0.6

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Benin	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	39.5	46.5	62.8	42.4	44.1	11.1	23.3	43.3	45.9	6.9

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Benin	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	n/a	25.8	33.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Benin	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	n/a	26.1	16.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Internal finance for investment (%)	77.1	73.7	84.4	88.3	61.1	37.9	52.1	83	79.4	66.8
Bank finance for investment (%)	13.7	19.6	8.3	4.6	27.1	43.5	33.3	8.8	11.4	24
Owners' contribution, new equity shares (%)	0.8	0.2	0.5	0.5	0	4.4	2.4	0.5	0	4.5
Informal finance for investment (%)	6.3	3.1	4.2	5.4	9.1	7.1	5.3	6.7	7.5	0.8
Suppliers/customers credit financing (%)	5.7	19.6	15.3	4.5	6.8	11.1	12.6	4.2	4.6	10.9
Loans requiring collateral (%)	90.6	73.6	80.8	81.8	94.1	100	95	86.7	88.6	94.4
Value of collateral needed for a loan (% of the loan amount)	118.7	109.4	132.7	145.6	75	128.9	116.7	121.1	126.7	107.8
Firms with annual financial statement reviewed by external auditor (%)	42.7	60	34.9	27.7	66.7	90	83.3	32.9	34.8	79.4

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Benin	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	n/a	6.8	12.5	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Value lost due to power outages (% of sales)	6.4	4	7.2	6.8	6.6	3.5	6.3	6.6	6.8	3.9
Delay in obtaining an electrical connection (days)	71.7	21.5	25.3	60.7	93.7	102.5	84.5	68.6	67.8	92.3
Delay in obtaining a mainline telephone connection (days)	159.7	24.7	26.9	160.9	181.3	111	140.9	164.6	170.2	105.6
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	n/a	1.4	1.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Firms using the Web in interaction with clients/suppliers (%)	24.9	28.6	12.7	14.2	40.5	60	50	17.5	20.9	44.1

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Benin	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	2.7	20.7	9.7	0.8	11.4	0	3.2	2.7	1.3	10.7
Firms using technology licensed from foreign companies (%)	3.6	12.4	12.3	0	11.9	10	11.1	1.9	1.2	14.7

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Benin	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	35.3	34.8	27.7	25.2	52.5	65	50	31.3	35.8	33.3
Employees receiving formal training (%)	n/a	60.7	51.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Experience of the top manager in the sector (years)	5.8	13.2	11.7	6.1	4	7.6	5.6	5.6	5.7	6.1

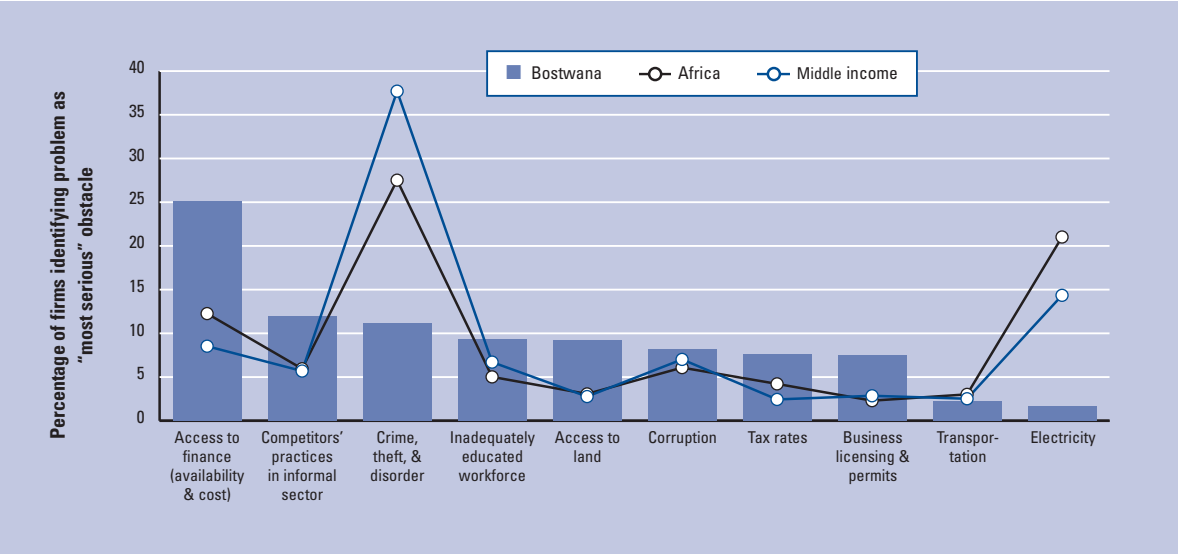
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Benin	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	6.3	5	7	—	4.9	8.5	5.7	7.7	7.4	4.9
Average time to claim imports from customs (days)	12.2	7.2	11.2	8.4	13	20.8	14.8	10.9	12	12.7
Exporter firms (%)	30	15.5	9.1	11.6	63.4	84.2	100	13.6	21.7	69.7
Firms using material inputs and/or supplies of foreign origin (%)	54.4	41.2	49.8	47.7	65	75	88.9	47	47.2	88.2

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Botswana 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Botswana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	5	5.7	6.1	4.5	5.9	6.3	8.2	4.8	4.5	5.5
Average number of visits or required meetings with tax officials	2.4	3.1	2	2.1	3	2.1	1.8	2.4	2.6	2.2
Time to obtain an operating license (days)	13.7	23.3	31.7	13.5	16.4	8.6	12.2	13.8	13.2	14.4
Time to obtain an import license (days)	24.5	26	29.4	32.5	13.1	13.8	28.5	24.2	25.5	23.8

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Botswana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	27.6	23.1	15.1	32.5	18	17.4	17.8	28.1	35.5	19.2
Firms expected to give gifts to obtain an electrical connection (%)	0	16.6	6.7	0	0	0	—	0	0	0
Firms expected to give gifts in meetings with tax officials (%)	4.5	10.5	3.8	3.2	8.5	2.3	4.1	4.5	4.2	4.7
Firms expected to give gifts to secure a government contract (%)	22.9	43.1	29.4	25.1	19.7	16.7	9.9	23.6	29.8	15.8
Value of gift expected to secure a government contract (% of contract value)	1.2	3.9	1.6	1.3	1	0.5	0.4	1.2	1.4	0.9

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Botswana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	69.6	54.5	59.4	68.1	69.3	82	76.8	69.3	70	69.2

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Botswana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	84.1	69.7	74.9	79.1	94.2	95.6	87.3	83.9	78.8	89.9
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	3.2	3.2	2.5	3.7	3.1	1.2	1.8	3.2	3.7	2.5
Security costs (% of sales)	2.6	2.3	2.1	3	2.1	1.5	2.3	2.6	2.5	2.7

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Botswana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	65.3	46.4	40.6	67.2	60.8	62.3	56.1	65.7	66.3	64.1

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Botswana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	40.9	25.7	22.7	42.3	35.4	44.7	49.9	40.5	46.7	34.5

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Botswana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	27.2	26	30.3	20.8	40.7	41.3	38.9	26.7	31.1	23
Internal finance for investment (%)	77.1	73.7	68.6	79.4	73.9	72.1	74	77.3	75.2	79.5
Bank finance for investment (%)	14.9	19.6	25	10.7	21	24.3	26	14.2	14.8	15.1
Owners' contribution, new equity shares (%)	0	0.2	0.1	0	0	0	0	0	0	0
Informal finance for investment (%)	4	3.1	2.6	5.5	2.3	0	0	4.3	5.5	2.2
Suppliers/customers credit financing (%)	23.1	19.6	21.4	18.6	31	37.1	30.7	22.8	21.7	24.7
Loans requiring collateral (%)	82.8	73.6	72	73.6	91	97.3	26.2	86.5	84.2	80.8
Value of collateral needed for a loan (% of the loan amount)	111	109.4	103.8	114.2	116.7	88.1	—	109.4	97.9	129.4
Firms with annual financial statement reviewed by external auditor (%)	66.2	60	70.5	59.7	74.2	94.2	89.7	65.2	63.4	69.3

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Botswana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	1.7	6.8	2.5	1.8	1.6	1.8	2.2	1.7	2	1.5
Value lost due to power outages (% of sales)	1.4	4.1	1.7	1.7	1	0.8	1.2	1.4	1.7	1
Delay in obtaining an electrical connection (days)	25.5	21.7	17.3	10.1	68.7	29.4	—	26.3	22.2	32.1
Delay in obtaining a mainline telephone connection (days)	22.8	25.1	23.8	19.9	20.6	36.7	33.4	22.4	18.6	28.6
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.2	1.4	1.4	1.4	1.4	0.2	0.2	1.3	1.5	0.7
Firms using the Web in interaction with clients/suppliers (%)	13.3	28.7	35.5	8.8	18.5	34.1	28	12.7	9.9	17.1

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Botswana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	12.7	20.7	25.3	7.7	23.1	23.2	17.6	12.4	12.8	12.5
Firms using technology licensed from foreign companies (%)	22.1	12.3	12.4	19.6	27.2	20.2	31.1	20.3	26.3	17.9

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Botswana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	37.7	34.8	36.3	29.1	47.3	42.9	50	35.1	34.6	40.8
Employees receiving formal training (%)	56.9	60.7	62	71.5	47.5	49.4	48.1	59.5	55.9	57.8
Experience of the top manager in the sector (years)	9.4	13.2	13.9	8.4	10.1	15.4	11	9.4	8.2	10.9

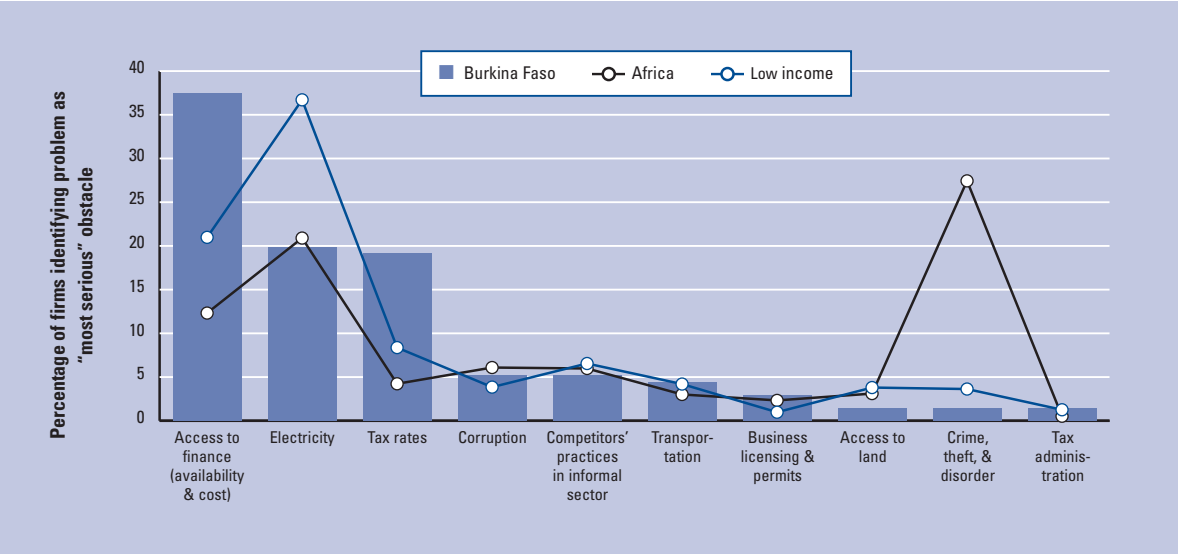
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Botswana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	1.3	5	4.6	1.4	1	2	1.3	1.4	1.7	1.2
Average time to claim imports from customs (days)	3.1	7.2	6.2	2.4	4.7	2	2.2	3.4	4	2.4
Exporter firms (%)	7	15.5	18.2	4	11.6	18.5	100	2.9	5	9.3
Firms using material inputs and/or supplies of foreign origin (%)	83.3	41.1	39	74.7	88	96.8	100	79.9	76.2	90.6

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Burkina Faso 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



BUREAUCRACY	MACRO DIMENSION			MICRO DIMENSION						
	Burkina Faso	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	9.5	5.7	4.7	8.8	12.4	9	7.6	9.7	9.7	7.7
Average number of visits or required meetings with tax officials	2.5	3.1	4.6	2.4	3.1	2	2.4	2.5	2.5	2.3
Time to obtain an operating license (days)	—	23	19.3	—	n/a	—	n/a	—	—	n/a
Time to obtain an import license (days)	2.3	26	20.2	—	2.6	—	—	2.7	2.4	—

CORRUPTION	MACRO DIMENSION			MICRO DIMENSION						
	Burkina Faso	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	87	23.2	43.8	92.3	75	—	80	88.9	90	—
Firms expected to give gifts to obtain an electrical connection (%)	12.5	16.5	25.5	20	—	—	—	14.3	14.3	—
Firms expected to give gifts in meetings with tax officials (%)	19.5	10.4	19.6	25	16.7	0	11.1	21.9	22.9	0
Firms expected to give gifts to secure a government contract (%)	80.8	42.6	50.1	86.3	70	—	63.6	82.8	83.3	50
Value of gift expected to secure a government contract (% of contract value)	10.2	3.8	5	11	8.6	—	7.1	10.6	10.7	4.1

COURTS	MACRO DIMENSION			MICRO DIMENSION						
	Burkina Faso	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	39.1	54.6	42.8	32.6	65	50	41.7	38.8	38.5	45.5

CRIME	MACRO DIMENSION			MICRO DIMENSION						
	Burkina Faso	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	87.8	69.8	57.4	86.8	88.9	100	92.3	87.3	88.9	76.9
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	1.8	3.2	5.8	—	n/a	—	—	—	2.1	—
Security costs (% of sales)	1.8	2.3	2.9	2.4	1.1	—	1.4	1.8	1.8	1.8

INFORMALITY	MACRO DIMENSION			MICRO DIMENSION						
	Burkina Faso	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	58.8	46.5	62.7	67.7	38.5	0	15.4	63.6	63	16.7

2006 Investment Climate Profile Burkina Faso

GENDER	MACRO DIMENSION			MICRO DIMENSION						
	Burkina Faso	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	23.3	25.8	33.9	20.8	30.8	33.3	46.2	20.8	21.7	38.5

FINANCE	MACRO DIMENSION			MICRO DIMENSION						
	Burkina Faso	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	29.5	26.1	16	21.7	48.1	83.3	61.5	26.2	28.6	38.5
Internal finance for investment (%)	72.9	73.7	84.4	78.2	59.7	50	33.2	78.2	74.5	58.3
Bank finance for investment (%)	21.1	19.6	8.3	14.2	38.6	50	65.9	15.2	19.1	40.6
Owners' contribution, new equity shares (%)	0	0.2	0.5	0	0	0	0	0	0	0
Informal finance for investment (%)	4.6	3.1	4.2	5.9	1.1	0	0	5.2	5.1	0
Suppliers/customers credit financing (%)	14.2	19.6	15.3	12.8	18.8	20	30	12.5	13.5	21.2
Loans requiring collateral (%)	85	73.7	80.8	100	71.4	80	60	93.3	100	40
Value of collateral needed for a loan (% of the loan amount)	104.4	109.4	132.7	116.8	—	—	—	101.1	105.1	—
Firms with annual financial statement reviewed by external auditor (%)	33.3	60	34.9	28.6	70	n/a	—	31	34.5	—

INFRASTRUCTURE	MACRO DIMENSION			MICRO DIMENSION						
	Burkina Faso	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	10.1	6.8	12.5	9.2	9.2	—	6.8	10.6	8.3	18
Value lost due to power outages (% of sales)	3.9	4	7.2	2.8	5.5	—	—	3.7	4.1	—
Delay in obtaining an electrical connection (days)	19.6	21.7	25.8	23.6	—	—	—	22	22	—
Delay in obtaining a mainline telephone connection (days)	44.8	25.1	28.3	—	47.6	—	—	59.3	62.3	—
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	3	1.4	1.6	2.7	4.6	0	5.5	2.4	3.2	2.4
Firms using the Web in interaction with clients/suppliers (%)	23.5	28.6	12.7	21.4	17.6	50	20	24.4	22	30

INNOVATION	MACRO DIMENSION			MICRO DIMENSION						
	Burkina Faso	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	7.4	20.7	9.7	4.9	11.1	33.3	15.4	6.5	7.3	7.7
Firms using technology licensed from foreign companies (%)	7.8	12.3	12.2	3.6	0	50	0	9.8	4.9	20

WORKFORCE	MACRO DIMENSION			MICRO DIMENSION						
	Burkina Faso	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	43.1	34.8	27.7	32.1	47.1	83.3	40	43.9	43.9	40
Employees receiving formal training (%)	n/a	60.7	51.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Experience of the top manager in the sector (years)	14.3	13.2	11.7	13.5	16.7	15.8	16.3	14	14.6	11.8

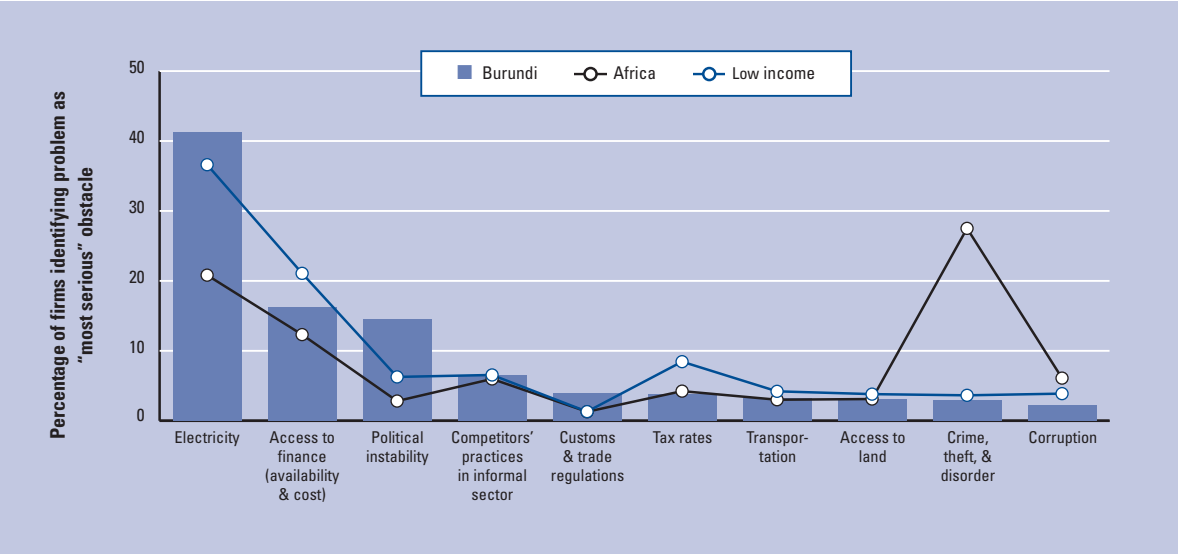
TRADE	MACRO DIMENSION			MICRO DIMENSION						
	Burkina Faso	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	2.8	5	7.1	—	3.7	—	2.3	—	3.1	—
Average time to claim imports from customs (days)	5.3	7.2	11.3	5	4.7	6.3	3.3	6.6	4.6	6.4
Exporter firms (%)	20.1	15.5	9.2	11.3	44.4	66.7	100	11.9	18.3	38.5
Firms using material inputs and/or supplies of foreign origin (%)	39.2	41.2	49.9	17.9	52.9	100	70	31.7	34.1	60

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Burundi 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Burundi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	5.7	5.7	4.7	5.4	7.5	4.3	—	5.7	5.8	5.3
Average number of visits or required meetings with tax officials	2.1	3.1	4.7	2.1	2.4	2.1	—	2.1	2	2.5
Time to obtain an operating license (days)	27.3	23	19.3	28.7	—	n/a	n/a	27.3	28.3	—
Time to obtain an import license (days)	11.8	26.1	20.5	14.6	6.2	4.5	—	11.9	13	7

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Burundi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	56.5	23	43.6	55.8	57.9	70.7	—	55.8	57.7	49
Firms expected to give gifts to obtain an electrical connection (%)	16.1	16.5	25.6	15.8	23.1	—	—	16.5	18.9	0
Firms expected to give gifts in meetings with tax officials (%)	22.6	10.4	19.6	19.8	29	71.2	—	22.6	20	38.7
Firms expected to give gifts to secure a government contract (%)	44.4	42.7	50.3	42.4	50.8	77.2	—	44.2	44	46.7
Value of gift expected to secure a government contract (% of contract value)	4.4	3.8	5	4.1	5.1	10.4	—	4.3	4.4	4.4

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Burundi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	40.7	54.6	42.8	39.5	47.8	39.8	—	41.1	40.5	41.9

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Burundi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	61.3	69.8	57.5	60.7	59.3	91.2	—	60.7	62.6	54.3
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	4.9	3.2	5.8	5.9	0.7	—	—	5.1	3.6	9.8
Security costs (% of sales)	2.4	2.3	2.9	2.4	3	0.4	—	2.4	2.5	1.8

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Burundi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	42.7	46.5	63	43.2	38	54.2	—	42	41.1	51.7

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Burundi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	34.8	25.8	33.8	35.8	30.7	26.4	—	35.2	36.6	25.2

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Burundi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	35.3	26	15.8	28.9	62.6	79.1	—	34.8	36.4	28.9
Internal finance for investment (%)	62.9	73.8	84.6	64.6	53.2	—	—	62.5	62.2	67.4
Bank finance for investment (%)	15.5	19.6	8.3	13.6	23.8	—	—	15.4	13.2	29.8
Owners' contribution, new equity shares (%)	0	0.2	0.5	0	0	—	—	0	0	0
Informal finance for investment (%)	21.5	3	3.9	21.8	22.7	—	—	22	24.5	2.7
Suppliers/customers credit financing (%)	8.8	19.6	15.4	8.2	9	24.6	—	8.6	8	13.1
Loans requiring collateral (%)	97.3	73.5	80.4	96.1	100	100	—	97.3	97	100
Value of collateral needed for a loan (% of the loan amount)	266.5	108.3	127.7	266.4	277.9	220.3	—	270.2	270.9	237.4
Firms with annual financial statement reviewed by external auditor (%)	14.9	60.2	35.2	12.3	26.8	29.6	—	14.3	14.9	14.8

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Burundi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	12	6.7	12.5	12.1	12	11.5	—	12.1	12.2	11.1
Value lost due to power outages (% of sales)	10.7	4	7.1	11.2	8.3	9.1	—	10.7	10.5	12.5
Delay in obtaining an electrical connection (days)	24.1	21.7	25.8	21	50.9	—	—	24.7	26.6	10
Delay in obtaining a mainline telephone connection (days)	36.6	25	28.2	35.9	38.7	n/a	—	37.8	40.1	14.2
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	0.3	1.4	1.6	0.3	0.3	0.2	—	0.3	0.3	0.2
Firms using the Web in interaction with clients/suppliers (%)	11.5	28.7	12.7	9.3	23.3	17.2	—	11.1	10.4	18

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Burundi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	7.1	20.7	9.7	4.8	16.1	26	—	6.6	6.4	10.9
Firms using technology licensed from foreign companies (%)	0	12.4	12.3	0	0	0	—	0	0	0

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Burundi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	22.1	34.8	27.8	20.5	22.1	38.9	—	21.5	25.8	9
Employees receiving formal training (%)	47	60.7	51.9	52.6	30.4	n/a	—	49	46.2	—
Experience of the top manager in the sector (years)	9.8	13.2	11.7	9.1	13	14.5	—	9.8	9	14

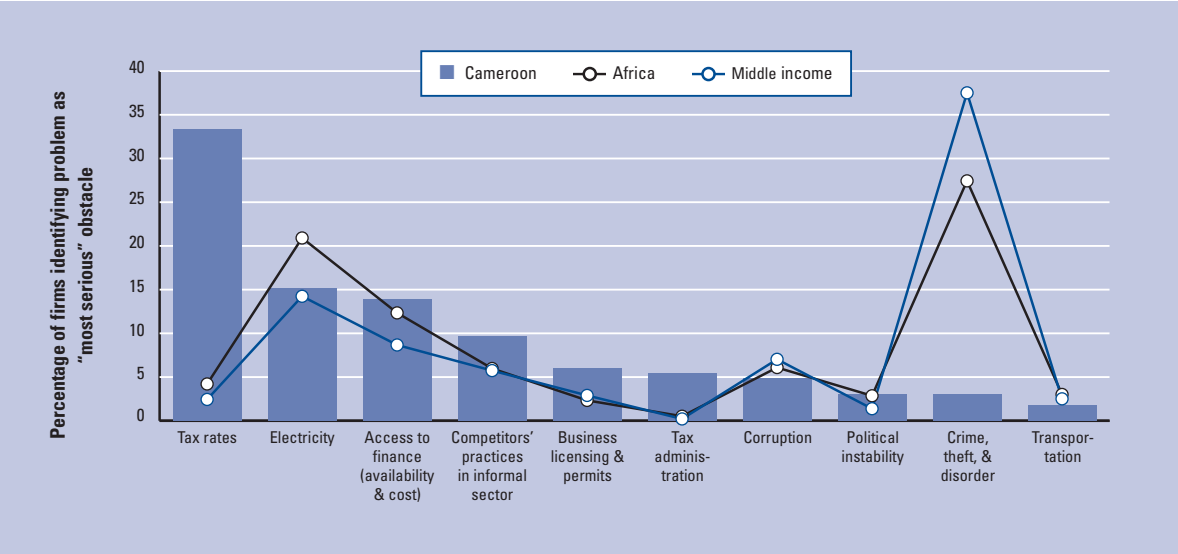
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Burundi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	—	5	7	—	—	n/a	—	n/a	—	—
Average time to claim imports from customs (days)	10.8	7.2	11.2	13.3	10	5.8	—	11	12.8	7.7
Exporter firms (%)	2.2	15.5	9.3	1	5.4	20.8	—	0.6	1.4	6.4
Firms using material inputs and/or supplies of foreign origin (%)	78.5	41.2	49.6	69.7	100	100	—	78	73.3	96.7

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Cameroon 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Cameroon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	12.8	5.7	6.1	13.6	14.2	9	11.1	13.3	13.4	10.9
Average number of visits or required meetings with tax officials	6.4	3.1	1.9	5.6	8.6	4.9	4.6	6.9	7	4.8
Time to obtain an operating license (days)	15.6	23.1	30.3	19.2	16.6	8.6	6.3	19.1	19	7.1
Time to obtain an import license (days)	20.9	26	29.3	35.1	19.4	17.4	12.3	28.3	26.3	16.5

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Cameroon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	77.6	23.1	15.1	78.5	85	60	64	81	81.2	59.1
Firms expected to give gifts to obtain an electrical connection (%)	47.4	16.5	6.5	50	57.1	—	—	44.4	52.9	—
Firms expected to give gifts in meetings with tax officials (%)	65.4	10.3	3.6	66.7	74.5	48.5	50	70.2	71.9	43.6
Firms expected to give gifts to secure a government contract (%)	85.2	42.6	28.7	87	86.2	76.9	75	88.2	91.3	61.1
Value of gift expected to secure a government contract (% of contract value)	7.3	3.8	1.6	8.5	6	5.9	3.6	8.4	8.1	4.6

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Cameroon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	25.6	54.6	59.5	29.3	23.1	20.6	25.6	25.6	25.8	25.6

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Cameroon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	92.4	69.8	74.9	86.6	98.1	97.2	97.5	90.8	90.7	97.6
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	3.8	3.2	2.5	3.7	5.7	1.1	2.9	4	4.2	1.8
Security costs (% of sales)	1.6	2.3	2.1	2	1.9	0.4	1	1.8	1.9	0.8

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Cameroon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	38.7	46.5	40.8	57.8	29.4	5.9	15.4	45.7	47.6	10

2006 Investment Climate Profile Cameroon

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Cameroon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	35.3	25.8	22.9	31.9	42.9	31.4	27.8	37.6	36.8	28.9

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Cameroon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	42.1	26	30.2	25.6	56.6	58.3	70	33.6	38.8	53.7
Internal finance for investment (%)	67.9	73.7	68.7	72	61.7	67.8	62.7	69.8	67.9	69.7
Bank finance for investment (%)	13.6	19.6	25	6.5	16.2	23.5	23.6	9.8	10.1	20
Owners' contribution, new equity shares (%)	4	0.2	0.1	3.1	6.3	2.8	5.7	3.4	4	4.1
Informal finance for investment (%)	11.3	3.1	2.6	13.8	13.6	3.8	5.2	13.5	14.8	2.6
Suppliers/customers credit financing (%)	16.4	19.6	21.4	15	13.8	23.3	19.7	15.4	13.9	24.7
Loans requiring collateral (%)	91.7	73.6	72	90.5	96.7	85.7	85.7	95.5	96	81.8
Value of collateral needed for a loan (% of the loan amount)	130.2	109.4	103.8	134.5	128.8	127.3	133.2	128.6	127.9	136.9
Firms with annual financial statement reviewed by external auditor (%)	70	60	70.5	54.3	73.6	100	100	60.8	62.2	97.6

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Cameroon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	12.7	6.7	2.5	13.8	11.6	11.6	11.2	13.1	13.9	8.8
Value lost due to power outages (% of sales)	3.9	4	1.7	2.4	5.9	4.2	3.2	4.1	4.4	1.9
Delay in obtaining an electrical connection (days)	78.9	21.7	17.3	97.6	78.1	—	—	81.1	83.4	—
Delay in obtaining a mainline telephone connection (days)	105.2	25	23.7	170.4	72.5	51	68.4	124.6	126.1	65.1
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	2.1	1.4	1.4	2.6	2.2	1.4	0.9	2.6	2.7	0.7
Firms using the Web in interaction with clients/suppliers (%)	20.2	28.6	35.3	11.4	20.8	27.8	26.3	17.3	21.7	16.7

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Cameroon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	16.4	20.7	25.2	9.6	17.3	30.6	40	9.2	10.9	34.1
Firms using technology licensed from foreign companies (%)	12.7	12.3	12.4	5.7	17	13.9	18.4	10	9.8	19.4

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Cameroon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	42.4	34.8	36.3	29.4	45.8	50	47.4	40	39	50
Employees receiving formal training (%)	n/a	60.7	62	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Experience of the top manager in the sector (years)	14.8	13.2	13.9	12.3	16.8	17.4	16.7	14.2	14.1	17.1

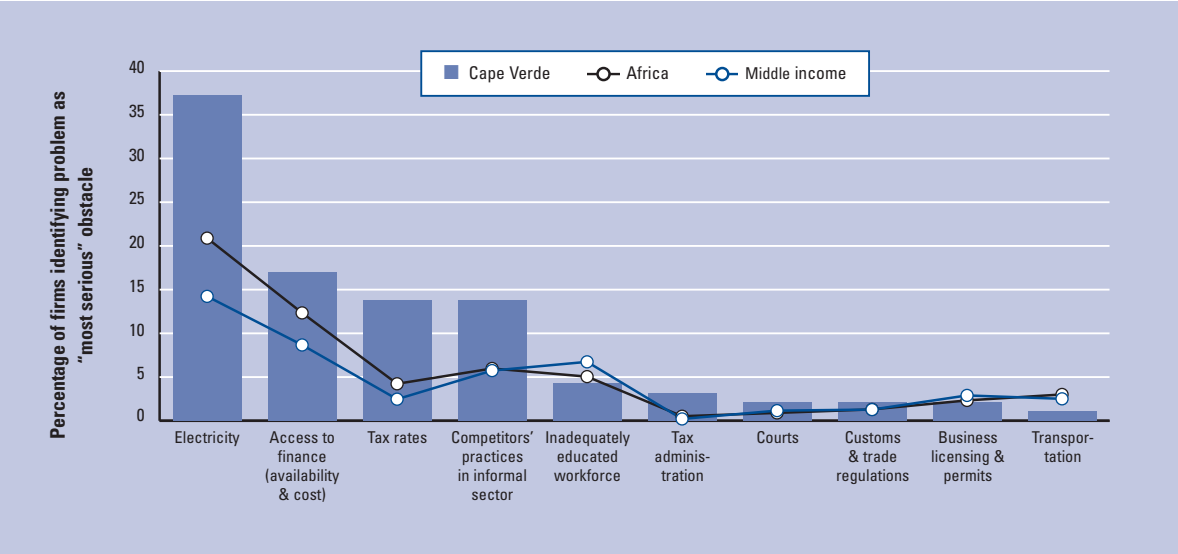
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Cameroon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	4.3	5	4.6	—	4.4	4.8	4	5.3	5.3	3.6
Average time to claim imports from customs (days)	11.7	7.2	6.2	9.7	12.3	11.8	11.2	12.2	15.3	7.4
Exporter firms (%)	38.5	15.5	18.1	18.5	38.5	83.3	100	19.4	26	78
Firms using material inputs and/or supplies of foreign origin (%)	54.6	41.2	39.1	25.7	56.3	80.6	81.6	42	42.2	83.3

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Cape Verde 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Cape Verde	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	12.2	5.7	6.1	9.2	19.5	—	—	12.3	12.1	12.6
Average number of visits or required meetings with tax officials	0.8	3.1	2	0.8	0.8	—	—	0.8	0.8	0.9
Time to obtain an operating license (days)	9.7	23	30.2	9.3	—	n/a	n/a	9.7	9.7	n/a
Time to obtain an import license (days)	6.4	26	29.4	3.6	9	—	n/a	6.4	6.4	n/a

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Cape Verde	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	5.6	23.2	15.2	4.3	8.3	—	—	5.7	6.3	0
Firms expected to give gifts to obtain an electrical connection (%)	3.8	16.5	6.6	3.1	5	—	—	3.8	4.2	0
Firms expected to give gifts in meetings with tax officials (%)	10.4	10.4	3.8	6.9	16.7	—	—	10.6	11.6	0
Firms expected to give gifts to secure a government contract (%)	14.1	42.8	29.1	17.4	4.2	—	—	14.3	15.6	0
Value of gift expected to secure a government contract (% of contract value)	0.5	3.8	1.6	0.7	0	—	—	0.5	0.6	0

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Cape Verde	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	61.8	54.6	59.5	57.8	70.8	—	61.8	62.7	50	

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Cape Verde	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	50.5	69.8	75	38.6	80.8	—	—	50	51.1	44.4
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	4.1	3.2	2.5	5	1.6	—	n/a	4.1	4.2	—
Security costs (% of sales)	1.3	2.3	2.1	1	1.7	—	—	1.3	1.4	—

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Cape Verde	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	19.6	46.5	40.8	25	7.4	—	—	19.8	20.2	12.5

Cape Verde

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Cape Verde	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	42.7	25.8	22.9	33.3	65.4	—	—	42.1	41.4	55.6

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Cape Verde	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	46.9	26	30.2	40	63	—	—	47.4	48.3	33.3
Internal finance for investment (%)	66.4	73.7	68.7	71.7	55.3	—	n/a	66.4	67.3	56.7
Bank finance for investment (%)	24.9	19.6	24.9	20.9	32.6	—	n/a	24.9	25.2	21.7
Owners' contribution, new equity shares (%)	0	0.2	0.1	0	0	—	n/a	0	0	0
Informal finance for investment (%)	7.5	3.1	2.6	5.9	12.1	—	n/a	7.5	6.6	16.7
Suppliers/customers credit financing (%)	5.8	19.6	21.4	2.6	14.4	—	—	5.8	6.4	0
Loans requiring collateral (%)	82.6	73.7	72.1	78.6	88.2	—	n/a	82.6	83.7	—
Value of collateral needed for a loan (% of the loan amount)	107.6	109.4	103.8	82.2	146.3	—	n/a	107.6	107.9	—
Firms with annual financial statement reviewed by external auditor (%)	42.9	60	70.5	35.7	63	—	—	42.3	42.7	44.4

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Cape Verde	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	12.5	6.8	2.5	12.8	12.2	—	—	12.4	11.9	17.7
Value lost due to power outages (% of sales)	4.3	4	1.7	3.3	6.8	—	—	4.4	4.4	3.4
Delay in obtaining an electrical connection (days)	7.8	21.7	17.4	9.2	—	n/a	n/a	7.8	8.6	—
Delay in obtaining a mainline telephone connection (days)	8.4	25.1	23.8	6.1	11.6	—	n/a	8.4	8.6	—
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	4.9	1.4	1.4	6.5	2.4	—	—	5	3.7	—
Firms using the Web in interaction with clients/suppliers (%)	21.3	28.6	35.3	7.4	42.1	—	—	21.7	20.9	—

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Cape Verde	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	12.2	20.7	25.2	12.9	11.1	—	—	12.4	12.4	11.1
Firms using technology licensed from foreign companies (%)	2.1	12.4	12.4	3.7	0	—	—	2.2	2.3	—

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Cape Verde	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	42.6	34.8	36.3	40.7	47.4	—	—	41.3	37.2	—
Employees receiving formal training (%)	n/a	60.7	62	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Experience of the top manager in the sector (years)	19.2	13.2	13.8	19.7	18	—	—	19.3	19.1	20.3

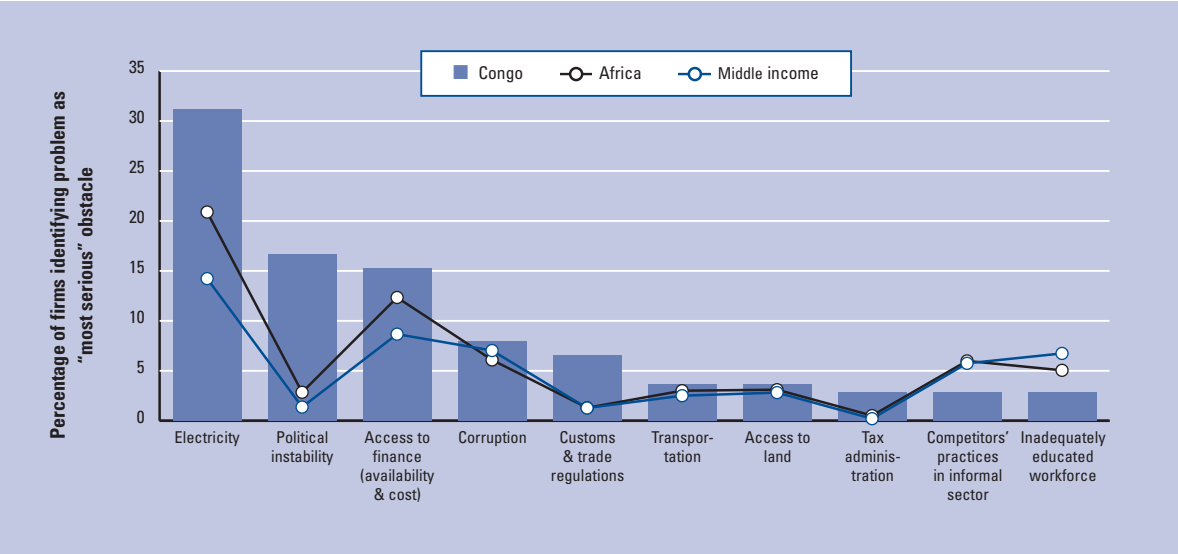
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Cape Verde	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	—	5	4.6	n/a	—	n/a	—	—	n/a	—
Average time to claim imports from customs (days)	10.6	7.2	6.2	11.2	10.4	—	—	10.7	11.1	—
Exporter firms (%)	4.1	15.5	18.1	1.4	11.1	—	—	3.1	1.1	33.3
Firms using material inputs and/or supplies of foreign origin (%)	48.9	41.2	39.1	29.6	73.7	—	—	47.8	44.2	—

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Congo 2009 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Congo	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	5.9	5.7	6.1	5.1	6.9	7.7	0.1	6.6	6.3	4.4
Average number of visits or required meetings with tax officials	2.9	3.1	2	2.9	2.6	3.3	1.7	3	2.9	2.9
Time to obtain an operating license (days)	—	23	30.1	n/a	—	n/a	n/a	—	—	—
Time to obtain an import license (days)	37.8	25.9	29.3	—	45.4	—	—	39.8	50.6	14.3

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Congo	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	48.3	23.2	15.2	50	50	—	—	50	47.8	50
Firms expected to give gifts to obtain an electrical connection (%)	15.6	16.5	6.6	15	22.2	—	n/a	15.6	11.1	40
Firms expected to give gifts in meetings with tax officials (%)	36.7	10.4	3.7	33.9	45.2	18.2	37.5	36.6	34.1	47.6
Firms expected to give gifts to secure a government contract (%)	72.7	42.7	28.9	87.5	75	—	n/a	72.7	81.3	50
Value of gift expected to secure a government contract (% of contract value)	3.4	3.8	1.6	5.4	—	—	n/a	3.4	4.6	—

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Congo	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	32.8	54.6	59.5	39.1	21.4	40	75	29.6	30.8	40

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Congo	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	60.1	69.8	75	47.4	72.5	81.3	60	60.2	57.3	69.7
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	17.3	3.2	2.5	20.4	14.6	—	—	17.5	20	—
Security costs (% of sales)	8.9	2.3	2.1	6.9	11.5	3.9	—	8.6	9.9	5.9

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Congo	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	86.8	46.5	40.8	90.9	86.4	80	80	87.9	86.2	88.9

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Congo	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	27.5	25.8	22.9	43.5	8.3	0	—	28.9	32.3	11.1

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Congo	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	11.7	26.1	30.2	5.4	17	25	11.1	11.7	9.5	18.8
Internal finance for investment (%)	87.7	73.7	68.7	86.8	90	85.5	—	87.3	87.3	90
Bank finance for investment (%)	3	19.6	25	4.7	0.9	3	—	3.1	3.1	3
Owners' contribution, new equity shares (%)	0.9	0.2	0.1	1.1	0.9	0	—	0.9	1	0
Informal finance for investment (%)	2.7	3.1	2.6	2.3	3.7	2	—	2.8	2.3	5
Suppliers/customers credit financing (%)	8.5	19.6	21.4	10.2	6.9	5.8	0	9.1	7.7	11.5
Loans requiring collateral (%)	69.2	73.7	72.1	—	83.3	—	n/a	69.2	62.5	80
Value of collateral needed for a loan (% of the loan amount)	52.9	109.4	103.8	—	—	—	n/a	52.9	—	—
Firms with annual financial statement reviewed by external auditor (%)	62.2	60	70.5	52.1	72.9	78.6	70	61.6	57.1	80

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Congo	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	27.4	6.7	2.5	26.3	27.7	33.6	—	27.6	29.6	19.6
Value lost due to power outages (% of sales)	15.7	4	1.7	16.7	13	—	10.7	16.1	15.9	15
Delay in obtaining an electrical connection (days)	8	21.7	17.4	6.9	11.8	—	n/a	8	7	12
Delay in obtaining a mainline telephone connection (days)	19.9	25.1	23.8	—	—	—	n/a	19.9	16.3	—
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	n/a	1.4	1.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Firms using the Web in interaction with clients/suppliers (%)	28.6	28.6	35.3	13.8	36.4	81.3	75	25.8	22.7	50

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Congo	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	23.8	20.7	25.2	9.7	33.3	75	62.5	21.2	18.6	45.8
Firms using technology licensed from foreign companies (%)	16	12.3	12.4	7.2	17.6	56.3	40	14.3	12.8	27.3

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Congo	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	38.5	34.8	36.3	26	49	66.7	20	39.8	31.5	62.5
Employees receiving formal training (%)	n/a	60.7	62	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Experience of the top manager in the sector (years)	12.5	13.2	13.9	10.9	13	20.1	18.8	12.1	11.6	16.2

	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Congo	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	—	5	4.6	—	—	—	—	n/a	—	—
Average time to claim imports from customs (days)	n/a	7.2	6.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Exporter firms (%)	10.3	15.5	18.1	7.4	14.3	12.5	100	3.7	8.8	15.6
Firms using material inputs and/or supplies of foreign origin (%)	100	41.2	39.1	100	100	100	100	100	100	100

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

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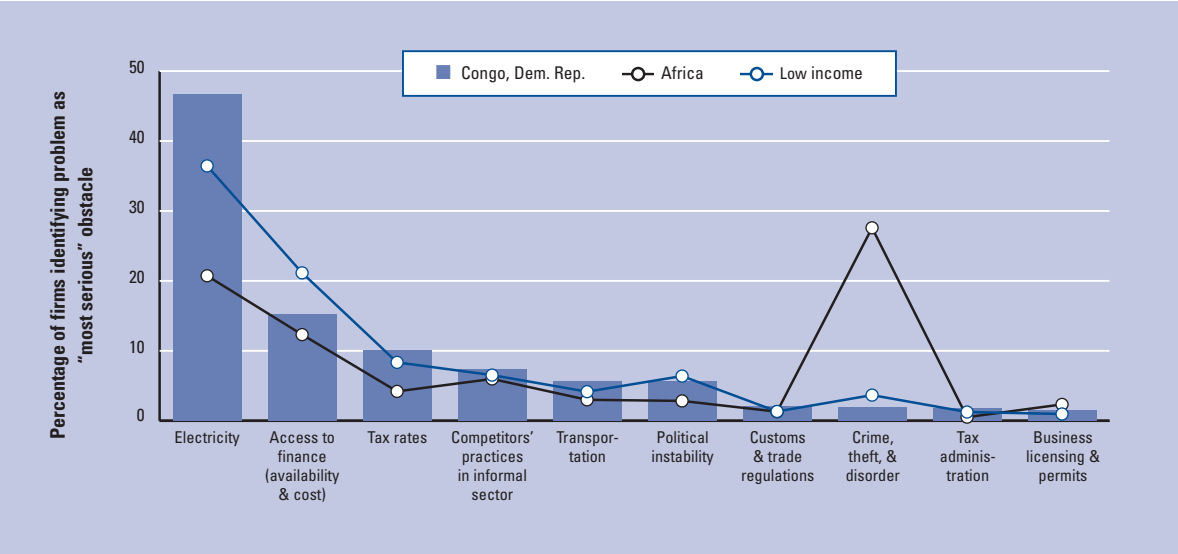
Congo, Dem. Rep. 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Congo, Dem. Rep.	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	6.3	5.7	4.7	5.5	9.9	8	13.1	6.2	5.9	8.4
Average number of visits or required meetings with tax officials	10	3	4.5	9.5	11.4	15.4	9	10.1	9.1	14
Time to obtain an operating license (days)	17.8	23.1	19.3	16.8	27.5	—	23.5	17.8	17.2	22.2
Time to obtain an import license (days)	14.6	26	20.2	—	12.8	14.2	—	15.8	16.4	13.3

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Congo, Dem. Rep.	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	83.8	22.7	42.7	83.2	88.5	68.7	100	83.4	83.9	83.4
Firms expected to give gifts to obtain an electrical connection (%)	61.9	16.3	25.1	59.2	100	—	—	62.4	61	—
Firms expected to give gifts in meetings with tax officials (%)	64.4	9.8	18.4	65.7	63.2	36.7	48	65.3	69.6	40.2
Firms expected to give gifts to secure a government contract (%)	80.5	41.8	49	80.3	85.5	54.7	100	80.1	80.6	80
Value of gift expected to secure a government contract (% of contract value)	8	3.7	4.9	7.9	9.1	4.4	11.2	7.9	8.3	6.1

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Congo, Dem. Rep.	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	19.8	54.8	43.3	20.7	18.3	0	26.6	19.2	19.7	20.4

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Congo, Dem. Rep.	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	34	70	58.1	29	49.9	93.5	55.6	33.8	31.5	47.6
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	6.5	3.2	5.7	6.7	5.4	—	—	6.6	6.2	10.6
Security costs (% of sales)	2.8	2.3	2.9	3.1	2.3	1.1	0.6	2.8	2.9	2.2

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Congo, Dem. Rep.	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	65.4	46.4	62.6	68.5	52.8	49.6	83.6	64.8	71	35.4

2006 Investment Climate Profile Congo, Dem. Rep.

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Congo, Dem. Rep.	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	21.2	25.9	34.2	22.5	18	0	0	21.8	23.5	8.8

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Congo, Dem. Rep.	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	5	26.2	16.3	4	7.9	20.5	16.4	4.8	3.4	13.9
Internal finance for investment (%)	85.3	73.6	84.3	85.3	86.8	79	70.3	86.8	86.3	78.3
Bank finance for investment (%)	3.7	19.7	8.5	2.2	6.6	17.2	29.7	3.1	1.7	18.3
Owners' contribution, new equity shares (%)	0.2	0.2	0.5	0	0	3.8	0	0.2	0	1.3
Informal finance for investment (%)	6.6	3.1	4.1	7.6	4.5	0	0	5.6	7.3	2.1
Suppliers/customers credit financing (%)	13.9	19.6	15.3	12.8	17	29.7	27.6	13.5	13.1	18.1
Loans requiring collateral (%)	91.2	73.6	80.8	86.3	100	—	—	90.6	89.3	93.7
Value of collateral needed for a loan (% of the loan amount)	129.1	109.4	132.7	113.3	151.6	—	—	129.6	106.6	156.9
Firms with annual financial statement reviewed by external auditor (%)	17.2	60.3	35.3	13	32.5	54	48	16.7	14.4	32.4

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Congo, Dem. Rep.	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	17.8	6.6	12.4	16.5	24.2	18.8	13.8	17.9	17.4	19.8
Value lost due to power outages (% of sales)	5.6	4	7.2	5.6	5.3	3.8	2.4	5.6	5.9	4
Delay in obtaining an electrical connection (days)	20.5	21.7	25.8	13.2	89.5	—	—	20.5	20.9	—
Delay in obtaining a mainline telephone connection (days)	29.2	25.1	28.3	30.4	29	—	—	31.8	30.2	—
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	0.7	1.4	1.7	0.4	1	1.4	6.2	0.3	0.7	0.6
Firms using the Web in interaction with clients/suppliers (%)	5.7	28.8	12.9	3.3	15	21.6	26.6	5.3	5	9.5

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Congo, Dem. Rep.	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	4.3	20.8	9.8	3	8.5	21.6	23.9	4	2.9	12.2
Firms using technology licensed from foreign companies (%)	3.7	12.4	12.4	0	7.1	18.7	0	3.9	0	12

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Congo, Dem. Rep.	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	11.4	34.8	27.9	9.2	11.4	28.7	45.2	9	9.6	15.4
Employees receiving formal training (%)	51.7	60.7	51.9	53.8	64.8	—	—	58.5	58.2	41.9
Experience of the top manager in the sector (years)	10	13.2	11.7	9	14.7	11.8	10.8	10.1	9.8	11.5

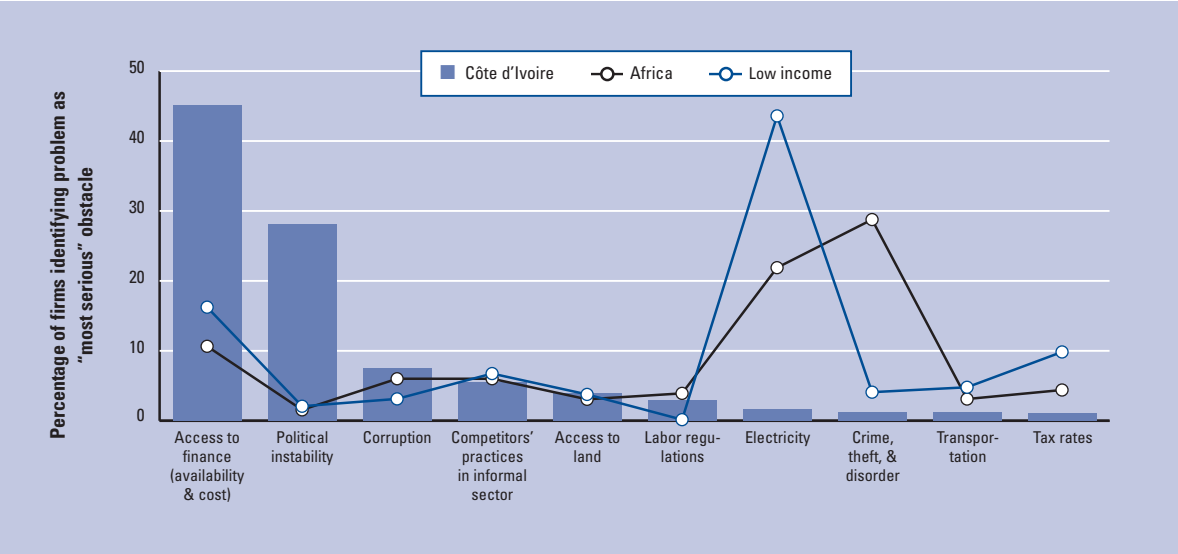
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Congo, Dem. Rep.	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	3.6	5	7.1	—	3.8	—	3.6	n/a	3.2	4.1
Average time to claim imports from customs (days)	13	7.2	11.2	16.4	12.7	12	4	15.2	17.9	12.1
Exporter firms (%)	2.4	15.6	9.4	1	7.7	15.1	100	0.4	1.7	6.6
Firms using material inputs and/or supplies of foreign origin (%)	58.4	41.2	49.7	52.6	61.5	91.4	77.4	57	52.6	71.2

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Côte d'Ivoire 2009 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



BUREAUCRACY	MACRO DIMENSION			MICRO DIMENSION						
	Côte d'Ivoire	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	1.6	5.9	5.3	1.4	1.9	8.6	4.8	1.6	1.6	2.2
Average number of visits or required meetings with tax officials	7.2	2.9	4.3	6.8	10.1	4.3	4	7.3	7.9	4
Time to obtain an operating license (days)	44.1	23	19.2	—	—	26.9	85.7	16.3	50	30.8
Time to obtain an import license (days)	23	26	20	28.7	20.6	12	28.8	21.9	24.2	20.3

CORRUPTION	MACRO DIMENSION			MICRO DIMENSION						
	Côte d'Ivoire	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	30.6	22.9	45.4	27.4	55.7	47.2	16.9	31	30.3	33.6
Firms expected to give gifts to obtain an electrical connection (%)	16.1	16.6	28	16	14.2	25.2	6.9	16.2	17.5	7.5
Firms expected to give gifts in meetings with tax officials (%)	13.6	10.3	20.4	13.4	13.2	20.8	4.6	14	12	21.9
Firms expected to give gifts to secure a government contract (%)	32.3	42.9	50.6	25.7	53.6	60	—	30	29	54.6
Value of gift expected to secure a government contract (% of contract value)	3.2	3.8	5.1	2.9	5.1	3.1	—	3	3.2	3

COURTS	MACRO DIMENSION			MICRO DIMENSION						
	Côte d'Ivoire	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	35.2	55.5	44.1	36.8	28.1	16.8	15.9	35.7	38.6	13.3

CRIME	MACRO DIMENSION			MICRO DIMENSION						
	Côte d'Ivoire	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	31	71.8	62.7	26	55.9	87.4	90.6	29.6	27.8	49.4
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	21.6	2.8	4.1	25.3	5.1	2.9	2.4	23.1	23.8	3.2
Security costs (% of sales)	7.7	2.2	2.7	9.4	4.4	3.4	1.5	8.3	8.5	3.1

INFORMALITY	MACRO DIMENSION			MICRO DIMENSION						
	Côte d'Ivoire	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	68.1	46.1	62.2	69.3	65	57.9	27.8	69.7	68.1	67.8

2009 Investment Climate Profile Côte d'Ivoire

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Côte d'Ivoire	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	61.9	25.2	32	67	44.5	7.1	0	64.2	68.8	39.5

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Côte d'Ivoire	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	11.5	26.8	16.9	10.1	15.9	37.4	43.4	10.7	12	8.9
Internal finance for investment (%)	88.9	73.2	83.8	90.7	85.7	75.3	90.9	88.9	90.3	81.5
Bank finance for investment (%)	3.7	20.1	8.9	3.3	4.4	7.2	4.1	3.7	3.9	3
Owners' contribution, new equity shares (%)	0	0.2	0.5	0	0	0.2	0	0	0	0.1
Informal finance for investment (%)	3.9	3.1	4.2	3.7	4.5	4.8	1.1	4	3.9	3.7
Suppliers/customers credit financing (%)	2	20.5	17.9	1.6	4.2	6.5	1.5	2	2	2.2
Loans requiring collateral (%)	43.2	74.3	85.5	30.4	86.2	71	92.4	38.3	40.9	60.7
Value of collateral needed for a loan (% of the loan amount)	55.9	110	137	31.1	78.8	78.2	97.1	44.1	52.9	72.9
Firms with annual financial statement reviewed by external auditor (%)	10.1	62.5	39.7	5.3	30.8	80.8	74.4	8.6	8	22.2

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Côte d'Ivoire	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	4.5	6.9	13.5	4.1	6.4	6.9	11.3	4.4	4.2	5.9
Value lost due to power outages (% of sales)	5	4	7.4	5.1	5.1	3.5	2	5	5.3	3.1
Delay in obtaining an electrical connection (days)	20.9	21.8	27.1	20.1	30.7	18.8	83.7	20.1	16.4	46.7
Delay in obtaining a mainline telephone connection (days)	5.8	26.3	33.7	4.7	11.4	18.8	6.6	5.8	5.8	5.9
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.4	1.4	1.7	1.8	0.3	1	0	1.5	1.6	0
Firms using the Web in interaction with clients/suppliers (%)	10.7	29.5	13.1	7.9	21.8	54.7	66.3	9.5	6.9	32.5

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Côte d'Ivoire	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	4.3	21.5	10.7	4.2	2.5	18.6	22.7	3.9	1.2	22.7
Firms using technology licensed from foreign companies (%)	3.7	12.5	13.2	1.4	9.1	14.8	9.8	3.2	1.2	19.7

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Côte d'Ivoire	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	19.1	35	28.5	13.6	28.7	65.2	83.6	14.4	17.8	27.6
Employees receiving formal training (%)	42.6	60.9	52.7	49	24	63.1	45.1	41.5	38.8	59
Experience of the top manager in the sector (years)	11.4	13.3	11.7	10.6	15	21	18.1	11.2	11.3	11.7

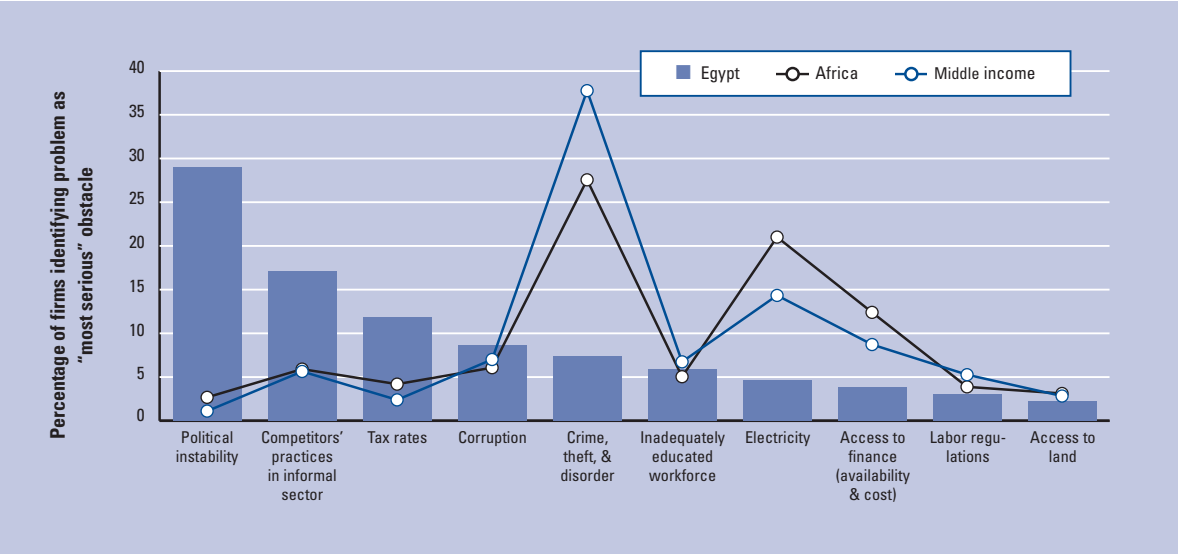
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Côte d'Ivoire	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	16.6	4.9	6.6	—	20.1	5.7	17.1	—	16.9	—
Average time to claim imports from customs (days)	31.2	6.9	10.2	19.9	39.8	14.2	44.5	17.1	32.9	24.1
Exporter firms (%)	3.4	16.1	10.3	1.3	12.7	32.3	100	1.2	2.5	8.7
Firms using material inputs and/or supplies of foreign origin (%)	27.1	41.5	52.3	20.6	39.2	73	79	23.2	25.7	35.8

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Egypt 2007 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Egypt	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	n/a	5.7	6.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average number of visits or required meetings with tax officials	3.8	3.1	1.9	3.8	4.2	3.5	3.5	3.8	3.7	4.1
Time to obtain an operating license (days)	81.5	22.8	29.6	81.9	120	60	81.8	80.1	83.1	—
Time to obtain an import license (days)	102.9	25.7	28.9	—	120	99.5	95	114.4	104.1	—

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Egypt	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	7.3	23.2	15.2	6.9	8.6	6.7	3.6	8.8	7.7	0
Firms expected to give gifts to obtain an electrical connection (%)	15.5	16.5	6.5	13.3	11.1	20	4.5	17.6	14.9	—
Firms expected to give gifts in meetings with tax officials (%)	14.1	10.4	3.6	22.2	14.9	7.2	6.7	16.3	14.3	9.1
Firms expected to give gifts to secure a government contract (%)	92.2	42.6	28.7	97	90	89.2	93.3	91.9	92	—
Value of gift expected to secure a government contract (% of contract value)	9.8	3.8	1.6	10	8.8	10.2	10.2	9.8	9.8	—

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Egypt	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	n/a	54.6	59.5							

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Egypt	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	n/a	69.8	74.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	n/a	3.2	2.5	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Security costs (% of sales)	n/a	2.3	2.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Egypt	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	34.8	46.6	40.8	45.2	34.5	26.7	22.7	38.4	35.1	27

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Egypt	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	20.9	25.9	22.9	19.2	20.9	23.3	28.7	18.8	20.6	31

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Egypt	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	14.1	26.1	30.3	5.1	11.7	22.4	23.5	11.1	13.7	24.3
Internal finance for investment (%)	85.5	73.6	68.4	92.5	89.8	78.1	81.5	87	85.6	82.3
Bank finance for investment (%)	9	19.7	25.2	2.2	6.4	15.2	11.6	7.9	8.8	12.6
Owners' contribution, new equity shares (%)	0.9	0.2	0	0	0.1	2.1	2.5	0.3	0.7	5.1
Informal finance for investment (%)	4.3	3.1	2.5	5.3	3.6	3.9	3.1	4.7	4.5	0
Suppliers/customers credit financing (%)	1.2	19.7	21.6	1.1	1.1	1.4	1.3	1.2	1.2	0
Loans requiring collateral (%)	82.3	73.6	72	82.4	82.1	82.3	80.4	83.5	82.6	77.8
Value of collateral needed for a loan (% of the loan amount)	133.7	109.4	103.7	165.7	175.4	115.4	120.8	141.5	134.4	120
Firms with annual financial statement reviewed by external auditor (%)	83.8	59.9	70.4	66.9	88.7	94.4	95	80.3	83.3	97.3

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Egypt	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	8.7	6.7	2.4	9.5	10.1	6.6	7.3	9.1	8.8	5.4
Value lost due to power outages (% of sales)	4.7	4	1.7	5.4	6.7	2.8	2.6	5.3	4.8	1.5
Delay in obtaining an electrical connection (days)	142.7	21.5	16.9	97.5	214.6	114	198	125	145.5	—
Delay in obtaining a mainline telephone connection (days)	85.5	25	23.5	114	124.5	58.7	53.5	99.1	88.4	—
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.1	1.4	1.4	1.7	1.3	0.6	0.7	1.2	1.2	0.4
Firms using the Web in interaction with clients/suppliers (%)	37.2	28.6	35.3	8.4	26.4	65.7	74.8	25.3	35.1	86.5

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Egypt	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	20	20.7	25.2	2.9	12.4	48.3	46.5	13.2	18.5	56
Firms using technology licensed from foreign companies (%)	8.1	12.4	12.4	1.6	6.5	16.5	14.3	6.2	6.5	44.2

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Egypt	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	21.2	34.9	36.4	7.8	11.7	36.8	39.5	15.5	19.9	54.1
Employees receiving formal training (%)	n/a	60.7	62	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Experience of the top manager in the sector (years)	17.3	13.2	13.8	15.8	16.1	19.1	19.5	16.6	17.3	17.8

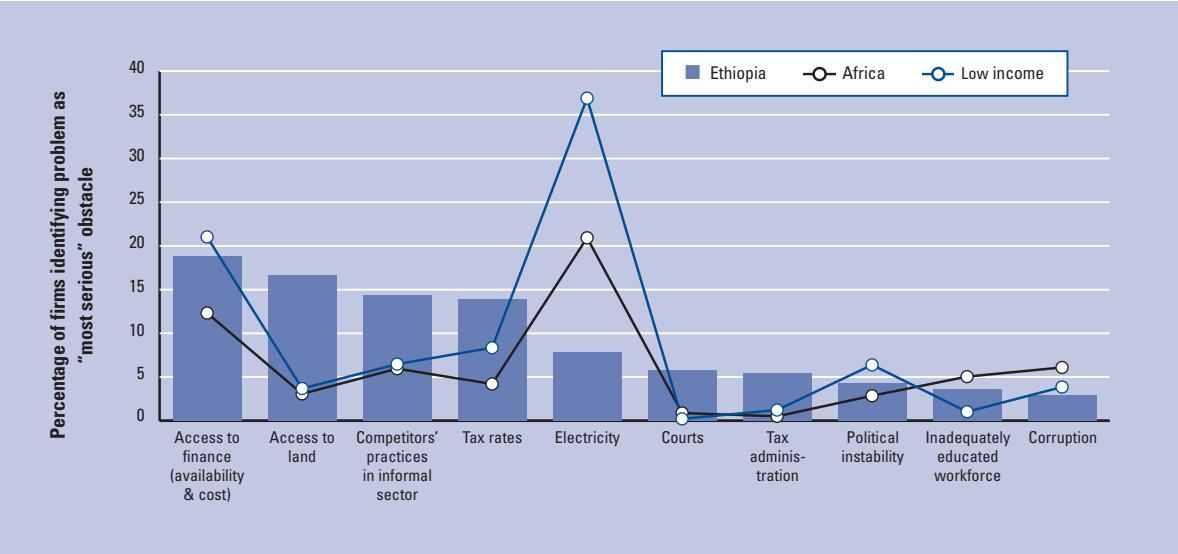
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Egypt	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	6.4	5	4.6	10.2	7.2	6.1	5.9	8.6	6.3	7.3
Average time to claim imports from customs (days)	8.7	7.1	6.2	12.1	9.1	8.5	7.3	10.2	8.8	7.6
Exporter firms (%)	31.5	15.4	18	12.4	22.3	60.3	100	11.5	30	67.9
Firms using material inputs and/or supplies of foreign origin (%)	49.2	41.1	39	20.8	47.4	72.8	83.5	38.6	47.3	92.7

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Ethiopia 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Ethiopia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	3.8	5.7	4.8	3.9	3.8	3.4	4.8	3.7	3.7	4.1
Average number of visits or required meetings with tax officials	1.8	3.1	4.6	1.7	1.8	2.2	2	1.8	1.8	1.4
Time to obtain an operating license (days)	11.3	23	19.3	22.1	4.4	5.8	—	11.6	11.4	—
Time to obtain an import license (days)	13.9	26	20.2	16.5	20.9	8.3	—	14.8	15.6	—

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Ethiopia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	12.4	23.2	44	13.4	13.6	8.1	15	12.3	12.2	16.7
Firms expected to give gifts to obtain an electrical connection (%)	6.5	16.6	25.6	9.8	3.6	4.3	0	7.1	5.7	20
Firms expected to give gifts in meetings with tax officials (%)	4.3	10.4	19.7	4.9	4.2	2.7	14.3	4.1	4.6	0
Firms expected to give gifts to secure a government contract (%)	11.8	42.9	50.6	13.2	15.6	3	5.3	12.2	11.9	10
Value of gift expected to secure a government contract (% of contract value)	0.8	3.8	5.1	0.9	1	0.2	0.3	0.8	0.8	0.9

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Ethiopia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	24.1	54.7	42.9	22.4	22.9	30.3	30.8	23.7	23.9	28

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Ethiopia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	91.9	69.7	57.2	87.7	96.6	95.7	100	91.4	91.6	96.4
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	1.4	3.2	5.8	2.2	0.8	0.3	0.3	1.5	1.5	—
Security costs (% of sales)	1.1	2.3	2.9	1.1	1.1	1.1	1.5	1.1	1.1	0.8

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Ethiopia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	51.6	46.5	62.8	62.2	42.9	34.3	31.8	52.8	52.8	30

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Ethiopia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	30.9	25.8	33.9	19.2	50	33.3	40.9	30.4	30.4	38.5

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Ethiopia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	46	26	15.8	30.8	59	64.9	68.8	44.4	45.8	50
Internal finance for investment (%)	78.6	73.7	84.4	86	72.3	77.2	74.3	79	77.8	87.6
Bank finance for investment (%)	14.9	19.6	8.3	8.3	21.4	15.1	19.6	14.4	15.4	9.2
Owners' contribution, new equity shares (%)	0.4	0.2	0.5	0	0.1	1.3	0.2	0.4	0.5	0
Informal finance for investment (%)	5.2	3.1	4.2	4.5	4.7	6.4	4.7	5.2	5.3	3.2
Suppliers/customers credit financing (%)	13.6	19.6	15.3	12.3	15.8	13.7	16.1	13.5	13.6	13.5
Loans requiring collateral (%)	96.3	73.6	80.5	94.4	96.6	98.4	100	95.9	96.6	92.9
Value of collateral needed for a loan (% of the loan amount)	173.6	109.1	131.4	177.9	174.4	167.9	144.1	177.1	176.2	135
Firms with annual financial statement reviewed by external auditor (%)	46.5	60	34.8	17.5	62.3	95.7	78.1	44.2	43.8	89.3

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Ethiopia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	5.1	6.8	12.5	4.8	5.4	—	6.2	5	4.9	—
Value lost due to power outages (% of sales)	0.9	4	7.2	0.6	1.2	—	—	0.9	0.9	—
Delay in obtaining an electrical connection (days)	44.2	21.6	25.6	25.5	45.8	75.8	77	42.1	43.7	—
Delay in obtaining a mainline telephone connection (days)	58.5	24.9	27.8	53.5	77.5	42	49.6	59.2	56.2	87.2
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	0.6	1.4	1.7	0.7	0.7	0.3	0	0.7	0.6	0.8
Firms using the Web in interaction with clients/suppliers (%)	18	28.6	12.7	4.9	24.7	41.5	68.8	14.4	16.3	46.4

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Ethiopia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	4.2	20.7	9.7	1.2	4.1	11.8	12.5	3.6	4	7.1
Firms using technology licensed from foreign companies (%)	4.2	12.4	12.4	1.2	3.7	10.5	12	3.6	3	20

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Ethiopia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	38.2	34.8	27.6	14.2	44.9	74.7	92	34.1	36.1	66.7
Employees receiving formal training (%)	n/a	60.7	51.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Experience of the top manager in the sector (years)	15.2	13.2	11.6	15	16.5	13.7	18	15	15	18.9

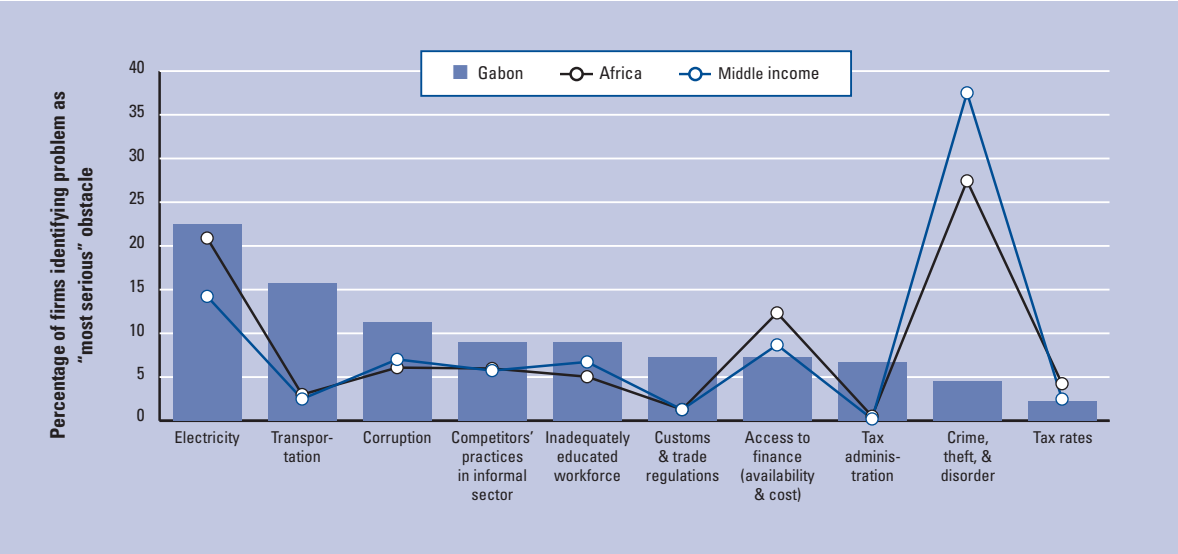
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Ethiopia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	4.3	5	7.1	n/a	4.9	3.9	4.7	—	4.4	3.8
Average time to claim imports from customs (days)	14.1	7.1	11.2	9.8	17.8	12.6	11.2	14.6	14.9	8.3
Exporter firms (%)	10.1	15.5	9.2	1.6	13	27.7	100	3.8	9.2	25
Firms using material inputs and/or supplies of foreign origin (%)	68	41.1	49.5	68.5	62	74.4	87.5	66.6	67.4	76

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Gabon 2009 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Gabon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	3	5.7	6.1	2.4	4.6	3.4	1.5	3.1	2.4	3.4
Average number of visits or required meetings with tax officials	22.6	3.1	1.9	28.3	10	9.8	19.6	22.8	16.5	26.8
Time to obtain an operating license (days)	12.7	23	30.1	12.2	—	—	n/a	12.7	13.7	—
Time to obtain an import license (days)	12.6	25.9	29.3	12.7	—	—	n/a	12.6	13.6	11.6

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Gabon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	24.1	23.2	15.2	21.4	32	16.7	20	24.4	14.3	28.8
Firms expected to give gifts to obtain an electrical connection (%)	20	16.5	6.6	23.1	—	—	—	21.1	—	12.5
Firms expected to give gifts in meetings with tax officials (%)	20.6	10.4	3.7	23.1	19.4	7.1	0	21.7	16.4	23.5
Firms expected to give gifts to secure a government contract (%)	27.8	42.7	29	20	40	—	—	29.4	14.3	36.4
Value of gift expected to secure a government contract (% of contract value)	1.4	3.8	1.6	0.7	2.2	—	—	1.5	0.3	2.1

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Gabon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	39.3	54.6	59.5	35.4	39.4	57.1	70	36.3	25	45

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Gabon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	67.3	69.8	74.9	60.2	77.3	84.2	61.5	67.7	73.8	63.2
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	3.7	3.2	2.5	4.4	—	—	—	3.8	5.7	1.2
Security costs (% of sales)	4.5	2.3	2.1	6.1	3	1.5	1.8	4.8	6.1	3.4

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Gabon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	62.7	46.5	40.8	75.2	41	38.9	50	63.7	78	53.5

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Gabon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	26.9	25.8	22.9	36.1	8.3	—	0	30.4	41.7	14.3

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Gabon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	9.6	26.1	30.3	4.6	14	31.3	7.7	9.7	9	10
Internal finance for investment (%)	92.5	73.7	68.6	98.9	89.4	75.7	88	93	97.4	88.7
Bank finance for investment (%)	2.7	19.6	25	0	2.9	12.9	3.5	2.7	0.9	4.2
Owners' contribution, new equity shares (%)	0.6	0.2	0.1	0	1.2	1.8	1	0.6	0	1.1
Informal finance for investment (%)	3	3.1	2.6	1.1	3.5	8.9	4.5	2.8	0.6	4.9
Suppliers/customers credit financing (%)	1.9	19.6	21.4	1.6	2.8	1.6	1.2	2	1	2.5
Loans requiring collateral (%)	57.1	73.7	72.1	—	66.7	—	n/a	57.1	60	55.6
Value of collateral needed for a loan (% of the loan amount)	64	109.4	103.8	—	—	—	n/a	64	—	—
Firms with annual financial statement reviewed by external auditor (%)	43.1	60	70.5	30.6	58.5	83.3	45.5	42.9	34.8	48.5

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Gabon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	7.9	6.8	2.5	8.7	6.6	7.1	4.8	8.3	9.3	7.3
Value lost due to power outages (% of sales)	1.8	4	1.7	2	2	0.2	0.6	1.9	1.9	1.8
Delay in obtaining an electrical connection (days)	35.7	21.7	17.4	46.1	—	—	—	37.9	—	26.5
Delay in obtaining a mainline telephone connection (days)	7.9	25.1	23.8	6.7	7.6	—	—	9	—	8.5
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	n/a	1.4	1.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Firms using the Web in interaction with clients/suppliers (%)	30.7	28.6	35.3	20.2	39.1	73.7	61.5	28.3	18.8	38.2

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Gabon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	22.3	20.7	25.2	10.3	34.9	68.8	58.3	19.5	15.6	26.5
Firms using technology licensed from foreign companies (%)	18.5	12.3	12.4	10.5	28.9	42.1	33.3	17.5	14.5	21.1

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Gabon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	33.7	34.8	36.3	24.3	34.9	84.2	76.9	30.1	32.8	34.3
Employees receiving formal training (%)	n/a	60.7	62	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Experience of the top manager in the sector (years)	13.8	13.2	13.9	13.1	15.6	14.2	15.3	13.7	15.6	12.7

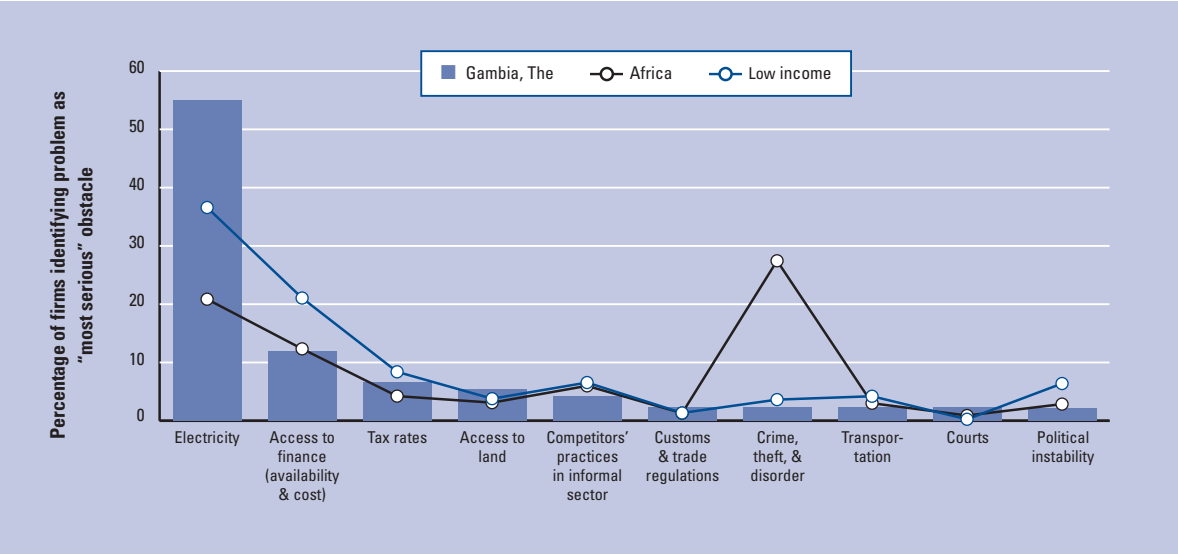
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Gabon	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	3.9	5	4.6	—	3.6	—	3.9	—	—	4.8
Average time to claim imports from customs (days)	n/a	7.2	6.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Exporter firms (%)	12.2	15.5	18.1	2.8	18.2	52.6	100	5	9.1	14.2
Firms using material inputs and/or supplies of foreign origin (%)	100	41.1	39	100	100	100	100	100	100	100

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Gambia, The 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Gambia, The	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	7.3	5.7	4.7	7.4	6.8	9.6	11.1	7.1	7.4	7.1
Average number of visits or required meetings with tax officials	3.2	3.1	4.6	2.9	3.6	—	3.9	3.2	3.1	3.5
Time to obtain an operating license (days)	9.1	23.1	19.4	9.8	7.4	—	6.8	9.2	9.2	8.8
Time to obtain an import license (days)	8.5	26	20.3	7.1	10.6	—	—	8.5	7.8	9.4

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Gambia, The	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	52.4	23.1	43.8	52.1	51	—	61.1	52	50.1	57.9
Firms expected to give gifts to obtain an electrical connection (%)	31.2	16.5	25.4	43.3	6.1	—	—	32.6	24.8	50
Firms expected to give gifts in meetings with tax officials (%)	13.6	10.4	19.7	18	3	0	0	14.2	12.1	16.9
Firms expected to give gifts to secure a government contract (%)	50.3	42.7	50.2	50.3	49.5	—	31.5	51.4	48.7	53.9
Value of gift expected to secure a government contract (% of contract value)	4.3	3.8	5	4.3	4.8	—	4.5	4.3	4.2	4.6

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Gambia, The	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	62.8	54.6	42.7	64.3	62.6	39.6	60	62.9	65	57.8

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Gambia, The	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	71.5	69.8	57.5	61.6	93.2	100	78.6	71.2	71.7	71.2
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	8.6	3.2	5.7	10	5.7	—	—	7.4	7.8	10.5
Security costs (% of sales)	6.1	2.3	2.9	7	4.9	2.9	6.4	6	7.2	3.6

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Gambia, The	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	88	46.5	62.6	90.6	84.1	65.9	83.1	88.2	87.2	89.9

2006 Investment Climate Profile Gambia, The

GENDER	MACRO DIMENSION			MICRO DIMENSION						
	Gambia, The	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	21.3	25.8	33.9	24.1	15.3	14.6	8.9	21.9	24.8	13.4

FINANCE	MACRO DIMENSION			MICRO DIMENSION						
	Gambia, The	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	16.6	26.1	16.1	8.1	32.8	54.3	37.5	15.5	13.9	22.5
Internal finance for investment (%)	78.7	73.7	84.3	82.9	74.2	—	84.2	78.4	80.6	73.7
Bank finance for investment (%)	9.8	19.6	8.4	5	15.8	—	7.9	10	7.4	16.2
Owners' contribution, new equity shares (%)	0.2	0.2	0.5	0	0.7	—	3.9	0	0.3	0
Informal finance for investment (%)	8.3	3.1	4.2	7.7	9.3	—	0	8.8	7.9	9.2
Suppliers/customers credit financing (%)	34.7	19.6	15.2	33	39.9	30.3	29.8	35	33.8	36.9
Loans requiring collateral (%)	86.1	73.7	80.8	79.6	93.5	—	—	84.4	82.3	91.5
Value of collateral needed for a loan (% of the loan amount)	193	109.4	132.4	149.4	220.5	—	—	202.1	164.1	231
Firms with annual financial statement reviewed by external auditor (%)	32.7	60	34.9	20.2	55.3	100	53.4	31.7	26.8	46.2

INFRASTRUCTURE	MACRO DIMENSION			MICRO DIMENSION						
	Gambia, The	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	23.8	6.7	12.5	23.8	23.8	24.6	26	23.7	25	21.3
Value lost due to power outages (% of sales)	11.8	4	7.2	11.7	12.8	—	17.5	11.5	11.7	12.1
Delay in obtaining an electrical connection (days)	63.9	21.6	25.6	42.7	107.8	—	—	61	73	38.8
Delay in obtaining a mainline telephone connection (days)	24.8	25.1	28.3	23.9	27.9	—	—	23.5	32.9	13.5
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.3	1.4	1.6	1.7	0.5	—	—	1	1.2	—
Firms using the Web in interaction with clients/suppliers (%)	13.6	28.6	12.7	7.6	24.3	46.6	14.9	13.6	9.3	23.4

INNOVATION	MACRO DIMENSION			MICRO DIMENSION						
	Gambia, The	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	22.2	20.7	9.6	15	37.2	45.7	52.6	20.7	17.3	33.2
Firms using technology licensed from foreign companies (%)	4	12.3	12.2	0	0	—	—	0	0	—

WORKFORCE	MACRO DIMENSION			MICRO DIMENSION						
	Gambia, The	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	25.6	34.8	27.8	22.6	18.8	—	—	23.1	22.2	—
Employees receiving formal training (%)	57.8	60.7	51.9	—	—	—	—	61.4	56.6	—
Experience of the top manager in the sector (years)	10.9	13.2	11.7	9.5	12.8	22.4	13.7	10.8	10.2	12.4

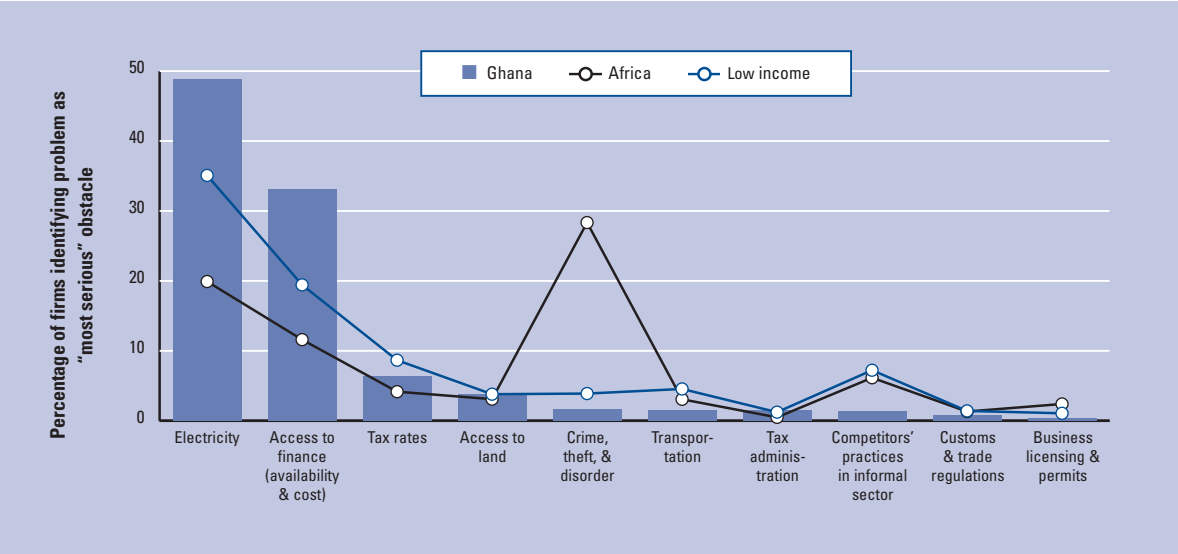
TRADE	MACRO DIMENSION			MICRO DIMENSION						
	Gambia, The	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	5	5	7	—	6.2	—	5.4	—	5.2	—
Average time to claim imports from customs (days)	3	7.2	11.3	—	2.7	—	—	3	2.8	—
Exporter firms (%)	8.6	15.5	9.2	4	19.1	17.4	100	4.1	7.1	11.9
Firms using material inputs and/or supplies of foreign origin (%)	63.2	41.2	49.8	58.5	62.4	—	—	60.7	57.4	—

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Ghana 2007 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



BUREAUCRACY	MACRO DIMENSION			MICRO DIMENSION						
	Ghana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	4	5.8	4.8	3.5	5.9	3.7	3.3	4.1	4	4.6
Average number of visits or required meetings with tax officials	4.6	3	4.6	4.6	4.9	3.6	6.1	4.5	4.7	3.9
Time to obtain an operating license (days)	6.4	24	20.4	5.5	5.6	12.8	—	6.3	5.7	—
Time to obtain an import license (days)	10.3	26.3	20.9	7.6	—	—	—	10.6	10.1	—

CORRUPTION	MACRO DIMENSION			MICRO DIMENSION						
	Ghana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	38.8	22.6	44.5	34.5	58.8	25.6	48.6	37.8	38.1	49.3
Firms expected to give gifts to obtain an electrical connection (%)	32.3	16.1	25.1	24.2	51.7	—	—	34.4	34.4	—
Firms expected to give gifts in meetings with tax officials (%)	18.1	9.9	19.9	14.6	36.1	1.3	18.3	18.1	17	33.2
Firms expected to give gifts to secure a government contract (%)	61.2	42.3	49.8	47.8	70.5	82.7	76.8	58.4	58	94.7
Value of gift expected to secure a government contract (% of contract value)	8.3	3.7	4.9	6.1	11.8	7.9	10.5	8	8.4	8.2

COURTS	MACRO DIMENSION			MICRO DIMENSION						
	Ghana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	59.8	54.4	40.5	61.5	49	71.8	49	60.9	59	71.6

CRIME	MACRO DIMENSION			MICRO DIMENSION						
	Ghana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	42.7	70.7	59.4	32.4	58	88.3	70.2	40	39.3	93
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	3.7	3.2	6	4.6	2.7	1.8	1.1	4.1	3.6	4.7
Security costs (% of sales)	3.1	2.3	2.9	3.7	3.4	1.1	1.4	3.4	3	4

INFORMALITY	MACRO DIMENSION			MICRO DIMENSION						
	Ghana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	59.2	46.1	63.2	58.4	60.2	63.2	61.5	59	59.5	54.3

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Ghana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	44	25.2	32.3	39.6	54.5	54.4	44.3	44	44.8	31.7

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Ghana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	22.2	26.2	15.3	13	36.6	61.3	51.3	19.4	19.9	56.2
Internal finance for investment (%)	86.6	73.1	83.9	90.3	84.5	70.9	71.5	88.4	88.4	63
Bank finance for investment (%)	9.6	20.1	8.2	6.4	10.6	24.3	17.3	8.7	8.2	27
Owners' contribution, new equity shares (%)	0.6	0.2	0.4	0	0	4.8	5.6	0	0.7	0
Informal finance for investment (%)	1.4	3.2	4.7	2.1	0.1	0	0	1.6	1.5	0
Suppliers/customers credit financing (%)	19.2	19.6	14.8	19.1	19.1	20	22.6	18.9	18.9	24.6
Loans requiring collateral (%)	69.8	73.8	82.9	56	84.2	73	63.6	71.4	71.9	58.6
Value of collateral needed for a loan (% of the loan amount)	128.2	108.9	133.4	114.8	117.5	162.8	131.8	127.4	132.2	102.4
Firms with annual financial statement reviewed by external auditor (%)	34.4	60.9	35	23.1	56.6	72.7	61.3	31.8	30.2	98.6

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Ghana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	9.7	6.6	13	9.7	9.1	10.7	7.8	9.9	9.8	8.6
Value lost due to power outages (% of sales)	6	3.9	7.4	5.7	6.6	7.5	5.7	6.1	6	6.9
Delay in obtaining an electrical connection (days)	24.4	21.7	25.8	25.5	18.1	—	—	25.8	22.8	—
Delay in obtaining a mainline telephone connection (days)	184.3	22.7	20.1	255.6	17.6	—	—	196.4	207.1	24.4
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.4	1.4	1.7	1.2	1.7	1.9	0.2	1.6	1.3	2.5
Firms using the Web in interaction with clients/suppliers (%)	8.2	29.3	13.3	4.5	11	30.6	28.9	6.2	5.8	44.4

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Ghana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	6.7	21.1	10.1	1	16.5	29.4	42.8	3.3	4.1	47.2
Firms using technology licensed from foreign companies (%)	11.7	12.4	12.4	5.6	23.9	19.8	35.6	8.6	8.8	46.7

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Ghana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	33	34.9	26.1	27.8	31.6	77.1	52	31.1	31.4	56.1
Employees receiving formal training (%)	52.7	61	51.6	60.6	59.8	31.1	29.4	57.5	52.9	50.5
Experience of the top manager in the sector (years)	15.7	13.1	11.1	15.2	16.8	17.5	16.3	15.7	15.8	14.7

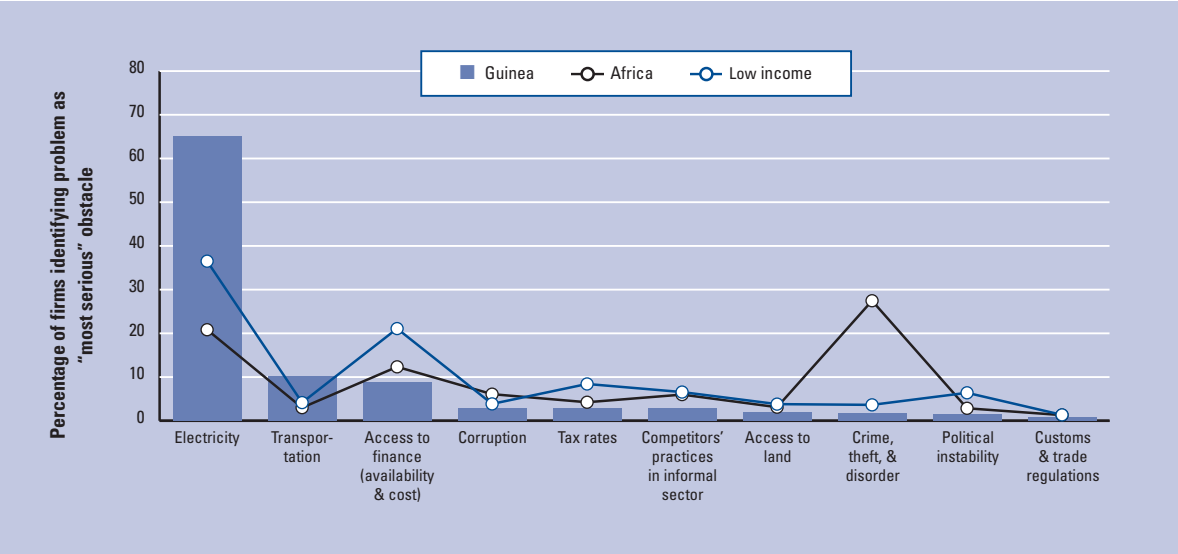
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Ghana	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	7.8	4.9	6.9	8.7	5.7	8.8	6.8	—	8.7	6.3
Average time to claim imports from customs (days)	6.8	7.2	11.8	3.1	7.3	9.4	8.9	5.2	6	8.7
Exporter firms (%)	24.4	15.2	7.2	18	34.9	51.1	100	17.1	22.3	56.1
Firms using material inputs and/or supplies of foreign origin (%)	51.1	40.8	49.5	51.1	49.3	54.6	47.9	51.5	51.2	49.8

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Guinea 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Guinea	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	2.6	5.7	4.8	2.4	3.8	6.1	2.8	2.6	2.3	5.7
Average number of visits or required meetings with tax officials	3.6	3.1	4.6	3.6	3.8	2.4	5.1	3.5	3.6	3.5
Time to obtain an operating license (days)	13	23	19.3	13.3	—	—	7.6	13.7	13.2	11.6
Time to obtain an import license (days)	13.9	25.9	20.2	14.5	—	—	—	17.6	16.2	—

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Guinea	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	84.8	23.1	43.5	84.5	91	71.5	93.7	84.2	85.4	78.4
Firms expected to give gifts to obtain an electrical connection (%)	56.7	16.4	25.2	61.6	—	—	43	57.8	60.9	31.1
Firms expected to give gifts in meetings with tax officials (%)	57.3	10.3	19.4	59	52.9	20.6	20.3	59.9	58.9	44.9
Firms expected to give gifts to secure a government contract (%)	74.6	42.5	49.9	76.4	68.1	43.7	75.3	74.5	74	79.6
Value of gift expected to secure a government contract (% of contract value)	7.9	3.8	5	8	7.2	8.5	9.2	7.8	7.8	9.2

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Guinea	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	25.7	54.6	42.9	23.3	40.7	44.2	51.6	24.1	25.9	23.7

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Guinea	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	40.5	69.8	57.6	39.2	51.5	41.1	60.4	39.3	35.3	87.5
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	8.3	3.2	5.7	8.4	—	—	—	8.4	8.5	6.8
Security costs (% of sales)	2.5	2.3	2.9	2.3	3.3	—	1.7	2.6	2.5	2.5

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Guinea	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	95.4	46.4	62.5	95.7	95.5	85.4	92.1	95.6	96.9	81.8

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Guinea	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	25.4	25.8	33.9	24.9	29.7	27.8	30.1	25.1	25.9	21.6

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Guinea	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	6	26.1	16.1	2.5	30.4	26.6	7.2	5.9	3.3	30.5
Internal finance for investment (%)	94.1	73.7	84.2	93.9	96.3	93.3	91.7	94.2	94.3	91.2
Bank finance for investment (%)	0.5	19.6	8.4	0	1.8	6.7	5.7	0.2	0.2	4.4
Owners' contribution, new equity shares (%)	0	0.2	0.5	0	0	0	0	0	0	0
Informal finance for investment (%)	3.1	3.1	4.2	3.4	1.9	0	2.6	3.1	3	4.4
Suppliers/customers credit financing (%)	21.9	19.6	15.3	21	36.3	0.1	17.7	22.1	21.5	25
Loans requiring collateral (%)	55.6	73.7	80.9	60.4	53.5	—	—	59.7	84.5	27.5
Value of collateral needed for a loan (% of the loan amount)	—	109.4	132.7	—	—	—	n/a	—	—	—
Firms with annual financial statement reviewed by external auditor (%)	7.4	60.1	35.1	5.5	13.9	41.1	7.2	7.4	4.8	30.6

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Guinea	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	33.9	6.7	12.4	34.8	28.5	21.9	36.6	33.7	32.6	46.1
Value lost due to power outages (% of sales)	13.9	4	7.1	14.1	13.9	10	15.8	13.8	13.8	15.3
Delay in obtaining an electrical connection (days)	16.1	21.8	25.8	17.5	—	—	14.4	16.3	15.9	18
Delay in obtaining a mainline telephone connection (days)	59.2	25.1	28.2	34.2	n/a	—	n/a	59.2	33.5	—
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.3	1.4	1.6	1.4	0.6	2.1	1.2	1.3	1.4	0.9
Firms using the Web in interaction with clients/suppliers (%)	8.4	28.6	12.8	6.1	9.4	70.4	23	7.5	6	30.7

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Guinea	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	5.2	20.7	9.7	4.4	4.9	26.6	13.5	4.6	3.8	18
Firms using technology licensed from foreign companies (%)	5.5	12.4	12.3	4	11.5	15.7	25.3	3.8	3.1	27.6

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Guinea	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	21.1	34.8	27.8	18.1	13.8	100	45.9	18.9	18.6	43.6
Employees receiving formal training (%)	56.3	60.7	51.9	57.6	—	—	—	56.8	61	—
Experience of the top manager in the sector (years)	11.2	13.2	11.7	10.4	17.6	13.3	11.6	11.1	11	12.7

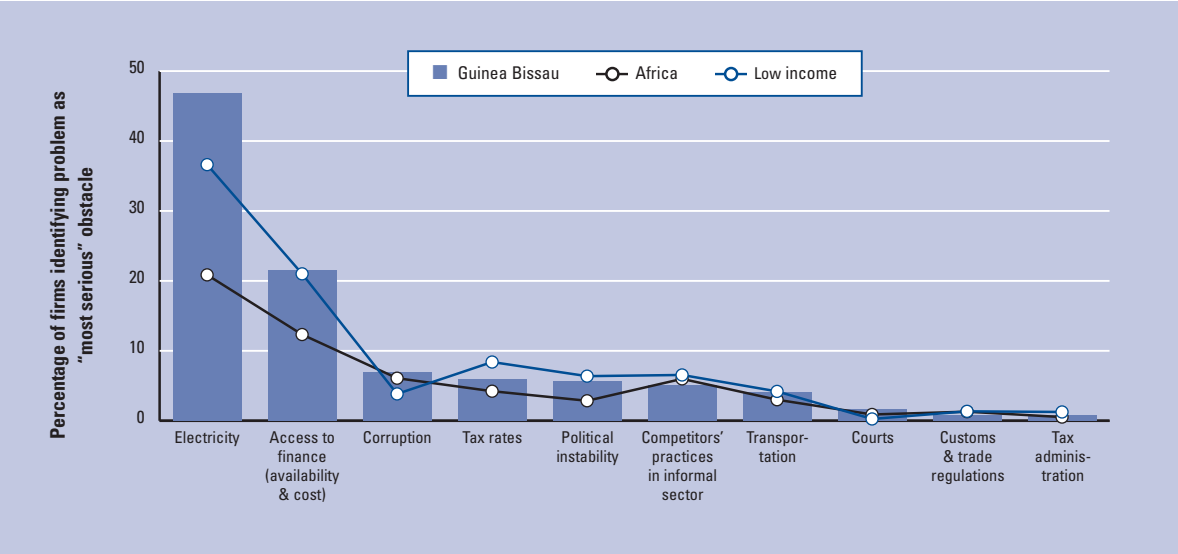
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Guinea	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	4.3	5	7.1	4.2	—	—	4.6	—	4.1	—
Average time to claim imports from customs (days)	10.4	7.2	11.2	12.5	—	—	5	12.3	6.5	14.6
Exporter firms (%)	14.7	15.5	9.2	11.9	31.7	41.2	100	9.5	13.1	29.8
Firms using material inputs and/or supplies of foreign origin (%)	66.1	41.2	49.7	61.7	88.5	82.9	83.2	64.6	64.7	78.7

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Guinea Bissau 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



BUREAUCRACY	MACRO DIMENSION			MICRO DIMENSION						
	Guinea Bissau	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	2.9	5.7	4.8	2.6	4	—	7.2	2.7	2.9	3
Average number of visits or required meetings with tax officials	4.4	3.1	4.6	4.4	3.3	—	—	4.5	4.4	4.7
Time to obtain an operating license (days)	30.4	23	19.2	32.5	22.1	—	—	30.7	30.7	27.8
Time to obtain an import license (days)	18.3	26	20.2	21.2	13.1	n/a	—	20.8	18.7	—

CORRUPTION	MACRO DIMENSION			MICRO DIMENSION						
	Guinea Bissau	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	62.7	23.1	43.7	61.4	69.3	—	—	62.1	63.4	57.2
Firms expected to give gifts to obtain an electrical connection (%)	8.4	16.5	25.6	6.6	18.7	—	—	8.7	7.5	—
Firms expected to give gifts in meetings with tax officials (%)	22.7	10.4	19.6	25.9	4	—	—	23.4	23.7	11.7
Firms expected to give gifts to secure a government contract (%)	48.4	42.7	50.2	45	62.6	—	—	48.2	48.2	50.4
Value of gift expected to secure a government contract (% of contract value)	2.8	3.8	5	2.6	4.3	n/a	—	2.8	2.9	2.1

COURTS	MACRO DIMENSION			MICRO DIMENSION						
	Guinea Bissau	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	12.1	54.7	42.9	11.7	16.4	—	0	12.5	11.8	14.8

CRIME	MACRO DIMENSION			MICRO DIMENSION						
	Guinea Bissau	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	56.3	69.8	57.5	51.4	85.9	—	77.1	55.6	56.7	52.3
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	3.3	3.2	5.8	3.5	—	n/a	—	3.4	3.4	2.8
Security costs (% of sales)	1.7	2.3	2.9	1.8	1.5	—	—	1.7	1.8	0.8

INFORMALITY	MACRO DIMENSION			MICRO DIMENSION						
	Guinea Bissau	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	68.2	46.5	62.7	71.8	36.8	—	45.7	69.1	68.1	69.1

2006 Investment Climate Profile Guinea Bissau

GENDER	MACRO DIMENSION			MICRO DIMENSION						
	Guinea Bissau	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	19.9	25.9	33.9	21.2	13.4	—	15.7	20.1	19.8	20.8

FINANCE	MACRO DIMENSION			MICRO DIMENSION						
	Guinea Bissau	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	2.7	26.1	16.1	2.1	7.8	—	15.7	2.3	2.3	7.4
Internal finance for investment (%)	85.3	73.7	84.3	85.2	95.2	—	—	84.6	85.2	85.7
Bank finance for investment (%)	0.8	19.6	8.4	0	0	—	—	0.9	0.9	0
Owners' contribution, new equity shares (%)	0	0.2	0.5	0	0	—	—	0	0	0
Informal finance for investment (%)	12	3.1	4.2	12.7	3.7	—	—	12.5	12.5	8.5
Suppliers/customers credit financing (%)	8.7	19.6	15.3	7.6	18.1	—	23.7	8.2	8.8	8
Loans requiring collateral (%)	84.2	73.7	80.8	—	—	n/a	—	—	—	—
Value of collateral needed for a loan (% of the loan amount)	—	109.4	132.7	—	—	n/a	—	—	—	—
Firms with annual financial statement reviewed by external auditor (%)	7.8	60.1	35.1	5.5	25.2	—	61.4	6	6.9	17.4

INFRASTRUCTURE	MACRO DIMENSION			MICRO DIMENSION						
	Guinea Bissau	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	9.2	6.8	12.5	8.3	11.6	—	—	9	9.6	3.7
Value lost due to power outages (% of sales)	5.2	4	7.2	5	7.1	—	—	5.3	5.1	6.8
Delay in obtaining an electrical connection (days)	20.5	21.7	25.8	21.8	19.3	—	—	20.1	20.9	—
Delay in obtaining a mainline telephone connection (days)	27.6	25.1	28.3	31.7	25.6	—	—	27.7	28.7	—
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	0.9	1.4	1.6	0.8	1.5	n/a	—	0.9	1	0.4
Firms using the Web in interaction with clients/suppliers (%)	8.8	28.6	12.8	5	30.6	—	54.3	7.3	8.4	12.7

INNOVATION	MACRO DIMENSION			MICRO DIMENSION						
	Guinea Bissau	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	8.4	20.7	9.7	8.6	7.8	—	15.7	8.1	7.5	16.9
Firms using technology licensed from foreign companies (%)	5.9	12.3	12.2	5	8.7	n/a	—	6.1	0	60

WORKFORCE	MACRO DIMENSION			MICRO DIMENSION						
	Guinea Bissau	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	12.4	34.8	27.8	7.6	29.2	n/a	—	10.6	11.6	20
Employees receiving formal training (%)	40.7	60.7	51.9	—	—	n/a	—	33.8	46.4	—
Experience of the top manager in the sector (years)	12.2	13.2	11.7	11.8	14.1	—	18.3	12	12.2	11.9

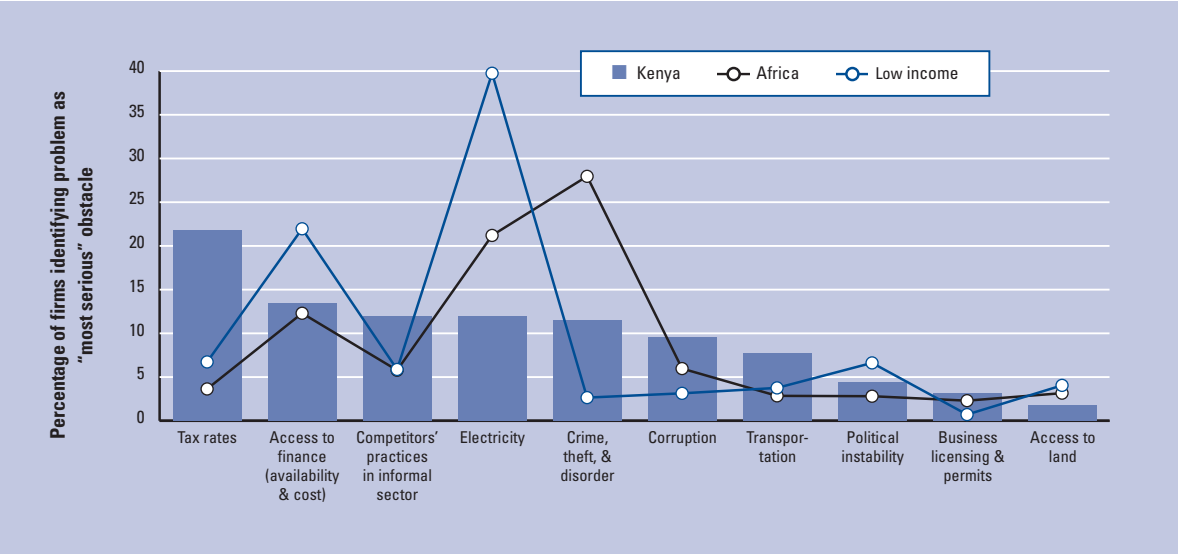
TRADE	MACRO DIMENSION			MICRO DIMENSION						
	Guinea Bissau	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	5.6	5	7	—	—	n/a	5.8	—	6.2	—
Average time to claim imports from customs (days)	11	7.2	11.2	—	—	n/a	—	—	—	—
Exporter firms (%)	6.4	15.5	9.2	2.6	34.1	—	100	3.2	6.2	8.1
Firms using material inputs and/or supplies of foreign origin (%)	68.4	41.2	49.8	69.8	63.7	n/a	—	66.9	67.2	80

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Kenya 2007 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Kenya	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	5.1	5.7	4.7	4.8	5.4	6.6	7.5	4.9	5.1	5.9
Average number of visits or required meetings with tax officials	9	2.8	4	10.3	7.7	3.6	3.8	9.4	9.3	5.5
Time to obtain an operating license (days)	23.4	22.9	17.7	23.3	21.8	28.3	14.4	24.1	24.1	13
Time to obtain an import license (days)	29.7	25.7	18.4	71.3	19.4	18.8	20.7	35.1	34.2	21.3

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Kenya	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	79.2	21.1	38.6	79.7	80	73.7	76.5	79.4	80.6	62.3
Firms expected to give gifts to obtain an electrical connection (%)	22.4	16.1	26	15.8	33	30.7	62.9	19.7	23.9	3
Firms expected to give gifts in meetings with tax officials (%)	32.3	9.3	18	36.2	26.5	19.7	27.3	32.6	33	23.2
Firms expected to give gifts to secure a government contract (%)	71.2	38.8	45.4	72	73.2	61.4	50.8	72.9	72.5	55.7
Value of gift expected to secure a government contract (% of contract value)	7.8	3.3	4.4	9.2	6	4.2	4.5	8.1	8	6

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Kenya	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	22.3	55.8	45.6	18.7	31.6	21.2	16.7	22.7	20.8	41.1

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Kenya	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	74.6	69.6	55.3	74.6	74.6	74.7	72.5	74.8	74.2	80.1
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	3.9	3.2	6.1	3.8	4.4	2.7	3.6	3.9	4	2.2
Security costs (% of sales)	2.9	2.3	2.9	2.8	3.1	3	2	3	2.9	3

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Kenya	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	60.5	46	63	62.4	60.7	48	33.6	62.7	61.3	51

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Kenya	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	37.1	25.4	33.3	35.2	42.4	35.5	33.2	37.4	36.2	48.7

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Kenya	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	25.4	26.1	14.8	17.6	30.7	63.6	58.7	22.8	24.8	33.1
Internal finance for investment (%)	78.4	73.5	85.4	83.1	74.6	66.5	58.8	80	79.6	65.9
Bank finance for investment (%)	15.5	19.8	7	11.7	16.1	31.2	35.4	13.9	14.5	26.2
Owners' contribution, new equity shares (%)	0.1	0.2	0.5	0.1	0.1	0.1	0.2	0.1	0.1	0.2
Informal finance for investment (%)	2.2	3.1	4.6	2.8	2	0.1	1.6	2.3	2.4	0.3
Suppliers/customers credit financing (%)	17	19.7	15.1	13.7	21.9	25.1	30.6	15.9	16.3	24.6
Loans requiring collateral (%)	86.1	73.2	79.6	85.9	92.6	78.2	77.1	87.9	86.1	86
Value of collateral needed for a loan (% of the loan amount)	120.8	109	135.4	114.5	125.4	125.3	124	120.2	121.3	117.1
Firms with annual financial statement reviewed by external auditor (%)	49.5	60.4	33	33.6	73.1	92.3	93.3	46.1	46.2	91.3

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Kenya	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	7.3	6.7	13.2	7.4	7.4	6.3	6.5	7.3	7.4	5.6
Value lost due to power outages (% of sales)	6.4	3.9	7.3	7.4	4.5	4.2	4	6.5	6.5	4.3
Delay in obtaining an electrical connection (days)	40.5	20.2	23.3	40.9	40.7	38.4	49.1	39.9	42.2	18.7
Delay in obtaining a mainline telephone connection (days)	27.1	25	28.6	20.3	37.3	32.1	39.9	26.1	29	5
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.6	1.4	1.6	1.8	1.7	1.3	1	1.9	1.8	0.5
Firms using the Web in interaction with clients/suppliers (%)	14.2	29.1	12.5	5.8	18	60.7	51.7	11.3	11.5	48.2

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Kenya	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	9.8	21	9.7	5.2	14.9	27.3	29.9	8.2	8	32.2
Firms using technology licensed from foreign companies (%)	16.3	12.3	12	9.1	13.2	26.6	26.2	11.1	13.6	29.2

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Kenya	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	40.7	34.8	27.3	18.6	36.5	65.3	55.7	32.9	39	48.6
Employees receiving formal training (%)	63.3	60.7	50.9	68.1	66	60.2	57.9	68.1	61.3	71.3
Experience of the top manager in the sector (years)	8.9	13.4	12	7.3	10.4	15.6	15.2	8.4	8.6	12

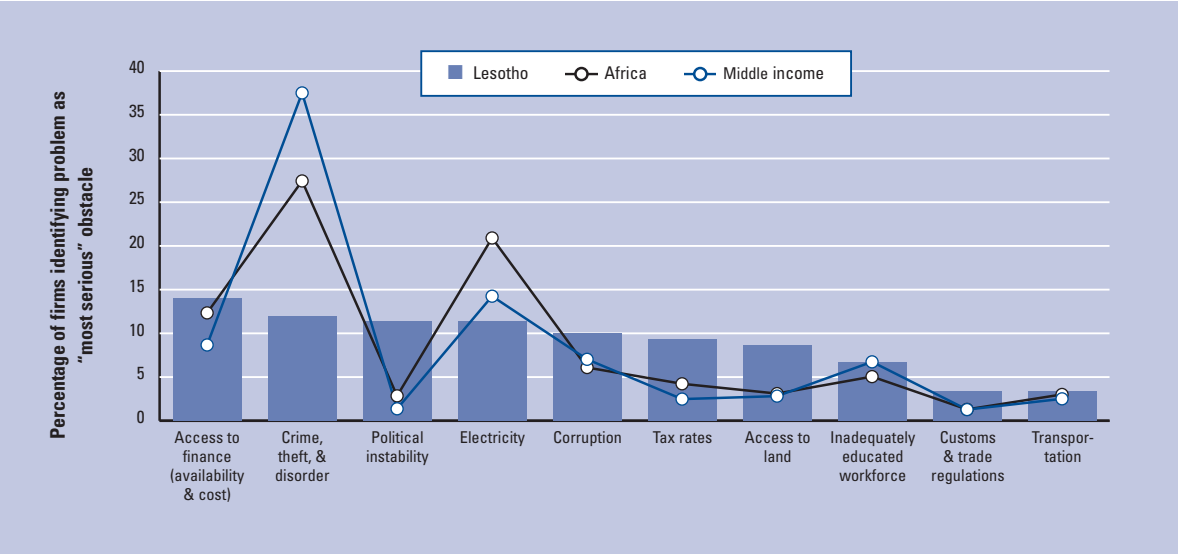
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Kenya	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	5.6	5	7.4	7	5.2	5.4	5.5	6.2	5.4	6.3
Average time to claim imports from customs (days)	12	7.1	11.2	12.6	12.9	11	10.6	13.6	11.7	12.8
Exporter firms (%)	10.3	15.7	9.1	2.8	15.5	46.5	100	3.3	9	26.7
Firms using material inputs and/or supplies of foreign origin (%)	60	41.1	49.4	31.9	62.3	81.2	83.5	47.8	54.6	86.2

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Lesotho 2009 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Lesotho	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	5.7	5.7	6.1	4.3	4.7	10.7	8.5	5.1	5.2	6.8
Average number of visits or required meetings with tax officials	3.2	3.1	2	2.4	2.2	5.4	5.7	2.6	2	4.8
Time to obtain an operating license (days)	10.9	23.1	30.3	12.7	9.5	8.4	8	11.6	10	12.9
Time to obtain an import license (days)	8.4	26	29.4	3.3	14.8	6.3	6.5	9.7	10.6	5.2

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Lesotho	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	12.9	23.2	15.2	10.7	6.9	31.3	35.7	9.2	13.7	10.7
Firms expected to give gifts to obtain an electrical connection (%)	17.1	16.5	6.6	13.3	7.1	33.3	10	19.4	17.9	15.4
Firms expected to give gifts in meetings with tax officials (%)	10.6	10.4	3.8	9.8	3.8	18.5	11.1	10.5	8.8	13.5
Firms expected to give gifts to secure a government contract (%)	30.9	42.7	29	24	38.9	33.3	14.3	33.3	34.2	23.5
Value of gift expected to secure a government contract (% of contract value)	0.6	3.8	1.6	0.8	0.5	0.2	0	0.7	0.5	0.7

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Lesotho	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	40.2	54.6	59.5	36.1	32.4	58.6	54.2	36.9	36	48.8

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Lesotho	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	74.5	69.8	74.9	56.2	90.2	96.8	96.4	69.2	67.7	87.8
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	6.7	3.2	2.5	6.7	7.4	5.9	6.5	6.8	6.7	6.6
Security costs (% of sales)	6.8	2.3	2.1	11	4.7	4.2	5	7.5	10	3.2

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Lesotho	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	n/a	46.5	40.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Lesotho	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	22.5	25.8	22.9	35.1	9.5	7.7	18.2	23.3	30	4.8

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Lesotho	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	29.1	26.1	30.2	23.3	40.9	25.8	25	30	31	25
Internal finance for investment (%)	54.7	73.7	68.7	43.3	59.9	66.8	69	51.4	51.3	62.1
Bank finance for investment (%)	17.6	19.6	25	25.1	17.8	4.2	6	20.3	22.7	6.4
Owners' contribution, new equity shares (%)	9.2	0.2	0	8.4	11.1	7.8	10	9	10.6	6.1
Informal finance for investment (%)	9.6	3.1	2.6	17	2	8	0	11.8	9.9	8.8
Suppliers/customers credit financing (%)	15.1	19.6	21.4	10.9	17.7	21.6	22.6	13.4	11	23.2
Loans requiring collateral (%)	58.5	73.7	72.1	58.8	64.7	42.9	16.7	65.7	56.7	63.6
Value of collateral needed for a loan (% of the loan amount)	56.9	109.5	103.9	19.7	80.9	—	—	58.3	35.2	107.5
Firms with annual financial statement reviewed by external auditor (%)	68.3	60	70.5	50	77.3	96.8	78.6	65.8	63.5	77.6

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Lesotho	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	7.1	6.8	2.5	8.5	6.2	5.8	2.8	8.1	7.8	5.8
Value lost due to power outages (% of sales)	6	4	1.7	5.9	4.4	7.8	6.4	5.8	6.9	4.4
Delay in obtaining an electrical connection (days)	35.6	21.7	17.3	47.3	20.4	39.7	15.1	43.2	36.2	34.5
Delay in obtaining a mainline telephone connection (days)	41.9	25.1	23.7	49.2	51.3	10.5	32.8	44.1	52.8	16.1
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	n/a	1.4	1.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Firms using the Web in interaction with clients/suppliers (%)	22.8	28.6	35.3	12	27.9	41.9	39.3	19	14	40.8

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Lesotho	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	31.9	20.6	25.2	13.4	35.7	73.1	73.1	22	24.4	46.7
Firms using technology licensed from foreign companies (%)	18.4	12.3	12.4	8.2	18.6	41.9	35.7	14.3	14.3	26.5

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Lesotho	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	52.7	34.8	36.3	34.2	59.1	87.1	75	47.5	44.4	69.4
Employees receiving formal training (%)	n/a	60.7	62	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Experience of the top manager in the sector (years)	12.5	13.2	13.9	10.9	14.2	13.8	12.9	12.4	11.5	14.4

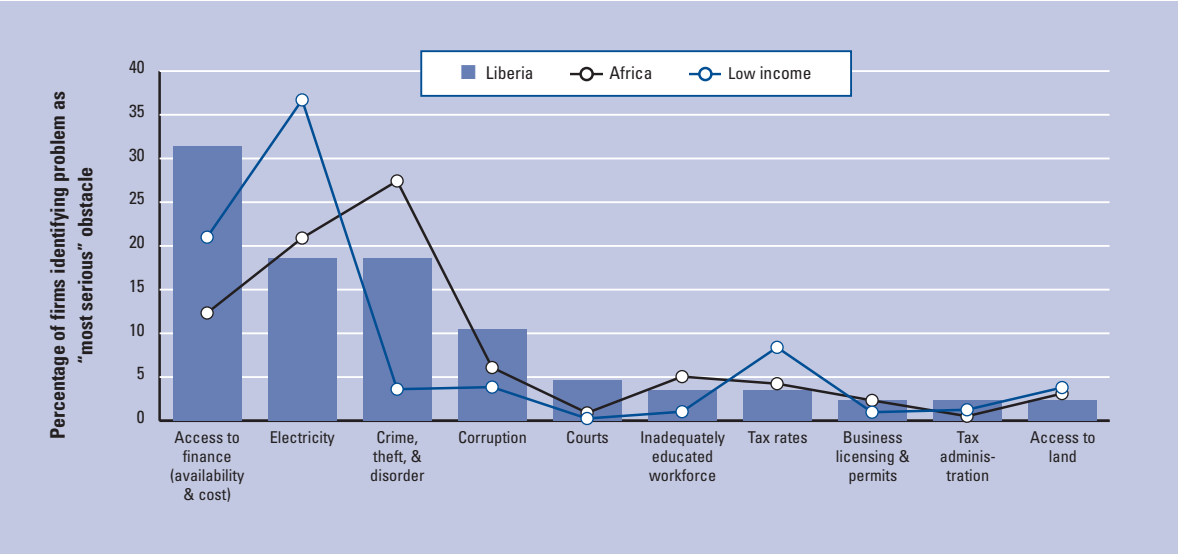
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Lesotho	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	8	5	4.6	—	2.3	12.8	8.8	—	6.7	8.8
Average time to claim imports from customs (days)	n/a	7.2	6.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Exporter firms (%)	26	15.5	18.1	5.6	31.8	64.5	100	8.5	15.5	46.9
Firms using material inputs and/or supplies of foreign origin (%)	100	41.2	39.1	100	100	100	100	100	100	100

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Liberia 2009 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Liberia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	8.5	5.7	4.7	6.4	17.6	11.9	n/a	8.5	8.4	8.9
Average number of visits or required meetings with tax officials	7.2	3.1	4.6	6.2	10.9	11	n/a	7.2	6.5	11.1
Time to obtain an operating license (days)	16.9	23	19.3	18.6	11.5	12.4	n/a	16.9	16.9	17.3
Time to obtain an import license (days)	12.4	26	20.2	18.4	7.2	—	n/a	12.4	14	8

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Liberia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	52.9	23.2	43.8	58.2	37.5	28.6	n/a	52.9	57.5	26.7
Firms expected to give gifts to obtain an electrical connection (%)	44.4	16.5	25.5	37.5	—	n/a	n/a	44.4	37.5	—
Firms expected to give gifts in meetings with tax officials (%)	50	10.4	19.5	53.3	45.5	14.3	n/a	50	52.1	36.8
Firms expected to give gifts to secure a government contract (%)	48.1	42.7	50.2	52.6	33.3	—	n/a	48.1	52.2	—
Value of gift expected to secure a government contract (% of contract value)	3.3	3.8	5	3.5	2.8	—	n/a	3.3	3.2	—

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Liberia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	48.6	54.6	42.8	48.7	42.9	62.5	48.6	48.8	47.1	

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Liberia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	64.7	69.8	57.5	57.6	86.4	100	n/a	64.7	59.2	100
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	7.9	3.2	5.7	6.8	11	11.3	n/a	7.9	8.7	3.5
Security costs (% of sales)	5.4	2.3	2.9	6.6	2.3	2.5	n/a	5.4	6.2	2.7

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Liberia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	90	46.5	62.6	95.8	72.7	60	n/a	90	92.3	75

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Liberia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	27.6	25.8	33.9	38.9	10	—	n/a	27.6	30.4	16.7

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Liberia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	21.4	26.1	16	18.6	22.7	50	n/a	21.4	21.4	21.1
Internal finance for investment (%)	80.6	73.7	84.3	78	85	99.4	n/a	80.6	79	91.9
Bank finance for investment (%)	6.8	19.6	8.4	8.1	2.9	0	n/a	6.8	7.7	0
Owners' contribution, new equity shares (%)	1.3	0.2	0.5	1.6	0	0	n/a	1.3	0.3	7.7
Informal finance for investment (%)	9.3	3.1	4.2	10.3	8.6	0	n/a	9.3	10.6	0
Suppliers/customers credit financing (%)	4.5	19.6	15.3	4.7	5.5	0.5	n/a	4.5	4.8	2.8
Loans requiring collateral (%)	73.3	73.7	80.9	81	20	—	n/a	73.3	70.4	—
Value of collateral needed for a loan (% of the loan amount)	53.3	109.5	132.9	52.1	n/a	—	n/a	53.3	56.9	—
Firms with annual financial statement reviewed by external auditor (%)	22.2	60	35	14	57.1	44.4	n/a	22.2	15.3	65

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Liberia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	5.3	6.8	12.5	5.6	—	4.7	n/a	5.3	5.4	4.6
Value lost due to power outages (% of sales)	3.7	4	7.2	3.5	—	5.7	n/a	3.7	3.8	2.6
Delay in obtaining an electrical connection (days)	—	21.7	25.8	—	n/a	n/a	n/a	—	—	n/a
Delay in obtaining a mainline telephone connection (days)	—	25.1	28.3	—	n/a	—	n/a	—	—	n/a
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	n/a	1.4	1.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Firms using the Web in interaction with clients/suppliers (%)	10.1	28.6	12.7	4.3	27.3	40	n/a	10.1	6.2	35

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Liberia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	4.7	20.7	9.7	1.7	9.1	30	n/a	4.7	3.8	10
Firms using technology licensed from foreign companies (%)	15.4	12.3	12.2	10.6	28.6	44.4	n/a	15.4	15.2	16.7

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Liberia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	29.5	34.8	27.7	25.4	45.5	40	n/a	29.5	27	45
Employees receiving formal training (%)	n/a	60.7	51.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Experience of the top manager in the sector (years)	14	13.2	11.7	12.9	20.9	12.6	n/a	14	12.7	22.7

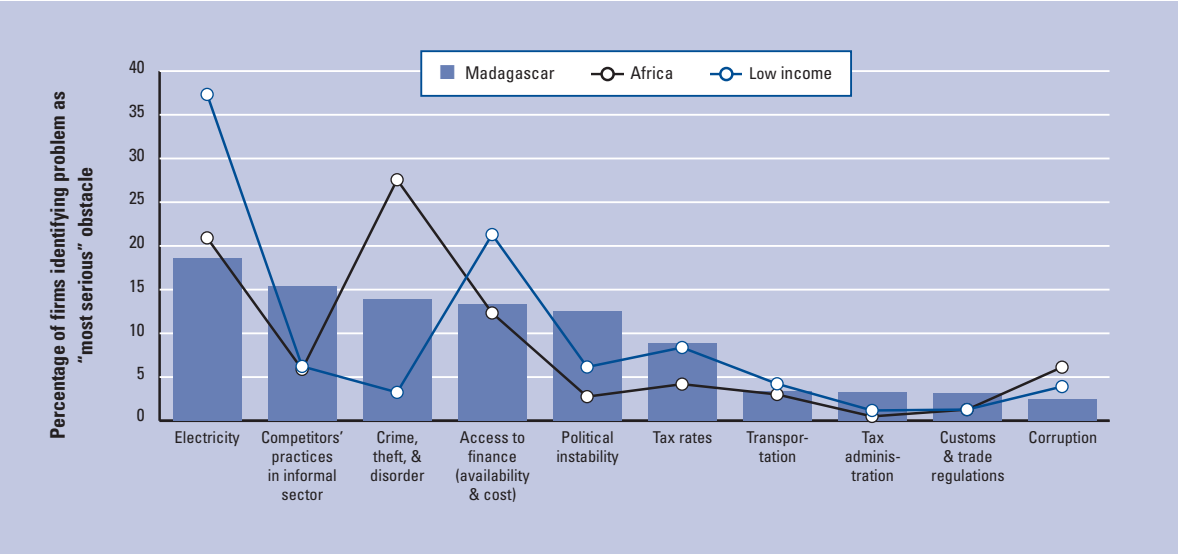
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Liberia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	n/a	5	7	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average time to claim imports from customs (days)	n/a	7.2	11.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Exporter firms (%)	0.7	15.5	9.2	0.8	0	0	n/a	0.7	0.8	0
Firms using material inputs and/or supplies of foreign origin (%)	100	41.2	49.7	100	100	—	n/a	100	100	100

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Madagascar 2009 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Madagascar	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	17.1	5.6	4.3	16.4	17.6	19.3	17.4	17.1	16.7	17.9
Average number of visits or required meetings with tax officials	1.7	3.1	4.7	1.8	1.5	2.2	1.8	1.7	1.5	2.1
Time to obtain an operating license (days)	41.3	23	19.2	45.2	31.5	46.1	—	44	47.3	30.5
Time to obtain an import license (days)	39.2	25.8	19.6	22.9	65.2	12.8	6	44.2	17	55.3

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Madagascar	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	19.2	23.2	44.5	20.7	17.9	16.2	21.5	19	19.5	18.5
Firms expected to give gifts to obtain an electrical connection (%)	20.9	16.5	25.5	4.7	45.6	0	13.8	21.6	14.6	27.6
Firms expected to give gifts in meetings with tax officials (%)	6.8	10.5	20	8.9	3.5	7.9	2.9	7.2	5.8	8.4
Firms expected to give gifts to secure a government contract (%)	14.1	43	50.7	12.2	14.4	21	19.6	13.9	14.1	14.2
Value of gift expected to secure a government contract (% of contract value)	0.2	3.9	5.1	0.4	0.1	0.1	—	0.2	0.1	0.5

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Madagascar	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	28.8	54.8	43.2	32	26	22.2	9.3	30.8	29.9	26.9

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Madagascar	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	60.5	69.9	57.4	53.2	65.8	79.8	78.9	58.6	53.7	72.6
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	4.8	3.2	5.8	7.7	3.1	2.3	2.2	5	5.4	3.8
Security costs (% of sales)	2.8	2.3	2.9	3.6	2.1	2.2	2.2	2.9	3	2.6

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Madagascar	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	35.6	46.6	63.8	37.9	37.9	17.1	21.3	37.2	39.7	27.9

2009 Investment Climate Profile Madagascar

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Madagascar	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	50	25.7	33.5	59.8	39.9	19.3	38.1	51.5	63.1	22.6

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Madagascar	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	20.6	26.1	15.9	15.1	26.7	28.1	23.8	20.3	19.5	22.6
Internal finance for investment (%)	79.5	73.7	84.5	77.1	85.8	68.9	74	80.1	84.7	72.1
Bank finance for investment (%)	6.1	19.7	8.5	4.9	4.5	12.7	13.7	5.2	7.2	4.6
Owners' contribution, new equity shares (%)	1.9	0.2	0.4	1.9	0.3	6	4.2	1.7	2	1.8
Informal finance for investment (%)	3.9	3.1	4.2	7.8	0.8	2.8	2.4	4	1.6	7.1
Suppliers/customers credit financing (%)	15.6	19.6	15.3	14.4	15.1	22.8	12.7	15.9	14	18.5
Loans requiring collateral (%)	86.2	73.6	80.6	97.5	75.5	89.4	90.7	85.7	91.7	77.9
Value of collateral needed for a loan (% of the loan amount)	106.1	109.5	134	90.7	123.2	108.2	112.8	105.2	104.5	109.3
Firms with annual financial statement reviewed by external auditor (%)	48	60.1	34.4	34.3	60.5	76.2	55.7	47.2	41.4	60

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Madagascar	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	13.7	6.6	12.5	13.8	12.4	17.1	14.5	13.6	12.7	15.2
Value lost due to power outages (% of sales)	7.7	4	7.2	8.5	7.4	5.6	5.6	8	8.8	5.9
Delay in obtaining an electrical connection (days)	92.1	21.5	25.4	53.6	70.1	151.7	—	68.6	125.9	62.7
Delay in obtaining a mainline telephone connection (days)	29.9	25.1	28.3	31.5	20.9	49.1	30.7	29.8	27.9	32.5
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	0.9	1.4	1.7	0.6	1.4	0.5	0.3	1.1	1.1	0.6
Firms using the Web in interaction with clients/suppliers (%)	24	28.7	12.3	15.1	32.2	41.5	33.8	23	19.4	32.1

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Madagascar	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	8.6	20.8	9.7	6	10.3	16.6	13.8	8.1	6.4	12.6
Firms using technology licensed from foreign companies (%)	14	12.3	12.2	10.9	13.9	19.2	15.3	13.6	9.6	21.4

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Madagascar	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	27	34.8	27.8	23.6	27.7	39.1	40	25.1	28.7	23.9
Employees receiving formal training (%)	31.5	60.8	52.6	44.4	27.3	20.7	35.4	29.7	30.5	32.7
Experience of the top manager in the sector (years)	15.6	13.2	11.5	15.4	15.8	15.6	14.1	15.7	15.4	15.8

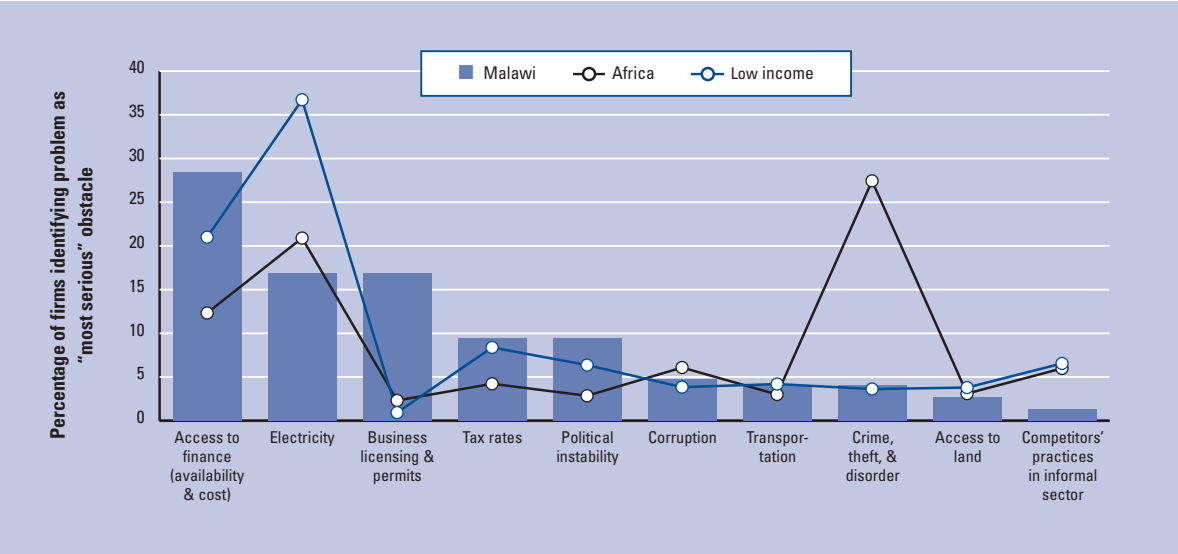
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Madagascar	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	14.2	4.9	6.5	1.8	17.1	17.7	14.9	11.1	6	17.7
Average time to claim imports from customs (days)	19.3	7	10.8	25.3	22.7	13.2	15.9	21.7	27.4	15
Exporter firms (%)	15.6	15.5	9	5.9	17.7	57.8	100	7.1	8.7	28
Firms using material inputs and/or supplies of foreign origin (%)	67	41.1	49.4	48.9	69.8	91.6	83	62.4	58.5	81.5

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Malawi 2005 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Malawi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	5.8	5.7	4.7	2.1	6.3	6.2	10.3	4.9	5.9	5.5
Average number of visits or required meetings with tax officials	8.9	3.1	4.6	4.3	9.6	9.6	10.3	8.7	8.8	9.5
Time to obtain an operating license (days)	17.4	23	19.3	12.3	19.2	15.6	28.2	15.2	17	18.2
Time to obtain an import license (days)	9.9	26	20.3	n/a	7.9	13.1	8.7	10.4	9.2	11.1

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Malawi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	35.7	23.2	43.8	28.6	33.3	41	59.1	30.1	34.8	38.5
Firms expected to give gifts to obtain an electrical connection (%)	18.2	16.5	25.5	—	20.8	20	14.3	18.9	19.4	15.4
Firms expected to give gifts in meetings with tax officials (%)	15.3	10.4	19.7	6.7	16.4	18.2	32	10.8	13.6	20.6
Firms expected to give gifts to secure a government contract (%)	12.3	42.8	50.3	0	14.3	15.4	20.8	9.9	11.1	16
Value of gift expected to secure a government contract (% of contract value)	0.7	3.8	5	0	0.7	0.9	0.6	0.7	0.7	0.5

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Malawi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	59.2	54.6	42.7	58.8	61.5	57.4	57.7	60	61.3	52.8

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Malawi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	1.3	69.8	57.7	0	1.2	2	0	1.6	1.8	0
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	2.2	3.2	5.8	2.3	3	0.8	1.6	2.4	2.6	1.1
Security costs (% of sales)	2.1	2.3	2.9	3.2	2.2	1.5	1.1	2.4	2.2	2

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Malawi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	55.3	46.5	62.7	62.5	60.9	45.2	42.3	58.1	62.5	36.1

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Malawi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	15.8	25.9	33.9	10.5	16.9	18.8	11.1	16.7	17.8	5.3

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Malawi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	29.6	26	16	10.5	28.9	40.4	42.9	26.9	28.8	31.7
Internal finance for investment (%)	61.6	73.7	84.4	86.9	56.3	60.9	58.9	61.8	63.2	57.6
Bank finance for investment (%)	23.1	19.6	8.3	9.2	22.9	27.6	27.6	22.4	22.6	24.5
Owners' contribution, new equity shares (%)	2.9	0.2	0.5	0	4.7	0.9	1.3	3.3	3	2.8
Informal finance for investment (%)	9.7	3.1	4.2	0	12.3	9.7	11.6	9.4	7.6	15.2
Suppliers/customers credit financing (%)	5.9	19.6	15.3	3.5	6.5	6.1	2.9	6.5	7.1	1.9
Loans requiring collateral (%)	73.9	73.7	80.9	—	79.2	70	75	73.5	76.5	66.7
Value of collateral needed for a loan (% of the loan amount)	100.8	109.4	132.8	—	102.7	97.5	83.8	106.7	105.6	84.3
Firms with annual financial statement reviewed by external auditor (%)	79.9	60	34.8	36.8	79.5	96.2	92.9	76.9	75.4	92.7

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Malawi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	76.8	6.7	12.3	53.6	78.8	83.3	63	78.7	75.3	81.9
Value lost due to power outages (% of sales)	22.6	4	7.1	23.7	20.9	25.5	17.2	23.5	21.7	25.1
Delay in obtaining an electrical connection (days)	98.5	21.6	25.5	—	130.3	66.3	92.1	99.8	119.7	44.5
Delay in obtaining a mainline telephone connection (days)	107.7	24.9	27.7	49.2	121.1	113.7	147.8	96.9	122	78.4
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	2	1.4	1.6	2.1	2.1	1.1	2	1.9	2.4	0.7
Firms using the Web in interaction with clients/suppliers (%)	23.3	28.6	12.7	5.3	25.3	26.9	46.4	18.5	19.5	34.1

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Malawi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	17.2	20.7	9.7	5.3	19.3	18	35.7	13.3	12.8	30
Firms using technology licensed from foreign companies (%)	15.7	12.3	12.2	0	15.7	21.2	21.4	14.6	11.9	26.8

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Malawi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	51.6	34.8	27.6	16.7	52.4	62.7	78.6	45.2	46.6	66.7
Employees receiving formal training (%)	n/a	60.7	51.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Experience of the top manager in the sector (years)	n/a	13.2	11.7	n/a	n/a	n/a	n/a	n/a	n/a	n/a

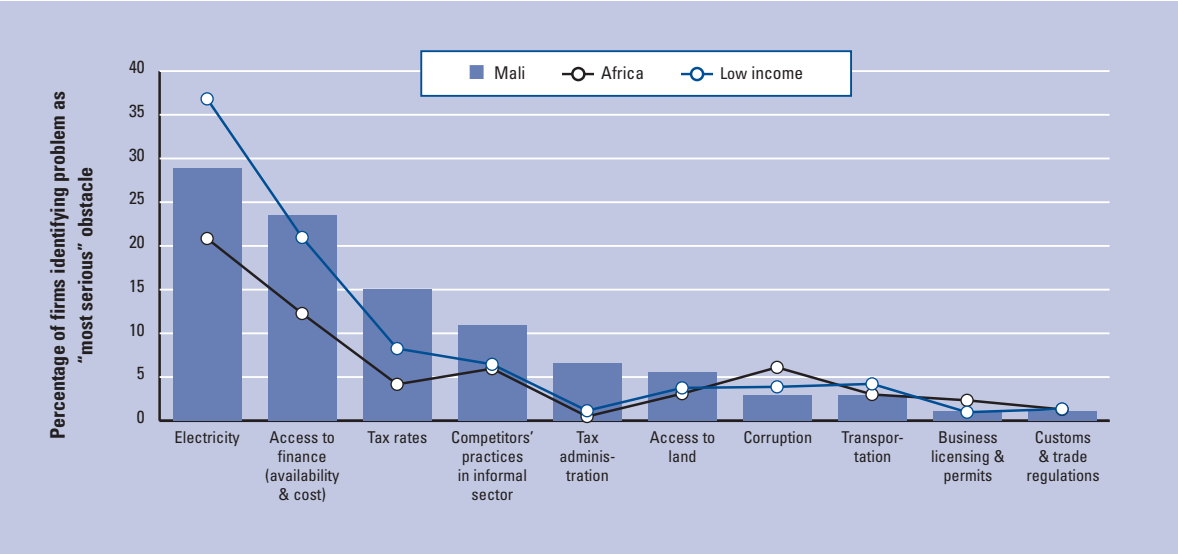
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Malawi	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	3.5	5	7.1	—	4	2.7	3.3	4.1	3.5	3.4
Average time to claim imports from customs (days)	6.4	7.2	11.4	5.5	7.2	5.7	8.3	5.9	6.3	6.8
Exporter firms (%)	28.5	15.5	9.1	5.3	21.7	45.1	100	13.1	22	47.5
Firms using material inputs and/or supplies of foreign origin (%)	66.9	41.2	49.7	33.3	63.4	84.6	85.7	62.5	60.7	85

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Mali 2007 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Mali	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	2.4	5.7	4.8	2.3	2.8	3.9	3.3	2.3	2.4	2.2
Average number of visits or required meetings with tax officials	2.3	3.1	4.7	2.2	2.5	2.5	2.2	2.3	2.3	2.5
Time to obtain an operating license (days)	40.9	22.9	19	39.3	45.7	—	9.3	43.6	36.1	—
Time to obtain an import license (days)	23.1	25.9	20.1	9.1	31.4	n/a	—	28.3	22.9	—

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Mali	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	28.9	23.1	44.1	27	37.1	25	39.2	28.3	28.6	32.8
Firms expected to give gifts to obtain an electrical connection (%)	27.7	16.5	25.5	21	46.2	n/a	—	26.4	25.7	—
Firms expected to give gifts in meetings with tax officials (%)	31.1	10.3	19.4	31.9	26.4	40.8	40	30.5	31.6	24.6
Firms expected to give gifts to secure a government contract (%)	80.4	42.6	50.1	82.8	74.3	—	n/a	80.4	80.5	—
Value of gift expected to secure a government contract (% of contract value)	7.6	3.8	5	7.7	7.4	—	n/a	7.6	7.3	—

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Mali	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	49.6	54.6	42.6	51.2	45.5	27.6	36.6	50.4	49.1	56.6

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Mali	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	39.8	69.9	57.9	32.5	65.6	84.2	69.8	38.1	38.4	60.1
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	3.7	3.2	5.8	3.1	5.6	n/a	5	3.6	3.7	3.3
Security costs (% of sales)	1.9	2.3	2.9	1.9	1.6	—	3.2	1.7	1.9	1.7

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Mali	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	39.7	46.6	63.2	42.3	26.6	59.2	41.6	39.6	40.2	33.1

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Mali	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	18.3	25.9	34.2	17.7	17	56.6	21.7	18.2	16.8	39.5

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Mali	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	10	26.1	16.2	5.8	22.5	56.6	27.2	9.1	9.7	14.7
Internal finance for investment (%)	94	73.6	84.1	96.9	84.2	88.4	95.3	93.8	93.8	95.6
Bank finance for investment (%)	3.4	19.7	8.5	1.6	8.3	11.6	4.7	3.3	3.3	4.4
Owners' contribution, new equity shares (%)	0.3	0.2	0.5	0	1.6	0	0	0.3	0.4	0
Informal finance for investment (%)	1.5	3.1	4.2	1.1	3.1	0	0	1.6	1.6	0
Suppliers/customers credit financing (%)	14.1	19.6	15.3	13.6	15.5	18	14.6	14	14.3	11.5
Loans requiring collateral (%)	83	73.6	80.8	74.1	92.3	—	100	80	81.1	—
Value of collateral needed for a loan (% of the loan amount)	172.6	109.3	132.1	166.2	187.7	—	178.5	171.3	171.1	—
Firms with annual financial statement reviewed by external auditor (%)	25.7	60.2	35.1	18.1	51	84.2	54.7	24	23.5	56.3

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Mali	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	4.3	6.8	12.6	4.2	4.9	—	5.5	4.3	4.4	3.4
Value lost due to power outages (% of sales)	1.8	4.1	7.3	1.8	2	—	3.4	1.7	1.8	1.6
Delay in obtaining an electrical connection (days)	48.4	21.6	25.6	34.8	82.6	n/a	—	44.3	49.7	—
Delay in obtaining a mainline telephone connection (days)	43.4	25.1	28.2	41.3	52.5	—	—	46.6	45	—
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	0.9	1.4	1.7	0.6	2	0.9	0.7	0.9	0.9	0.7
Firms using the Web in interaction with clients/suppliers (%)	12.9	28.7	12.7	5.2	38.9	68.4	33.5	11.7	9.9	54.4

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Mali	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	8.6	20.7	9.7	4.8	21	40.8	28	7.4	6.9	33.7
Firms using technology licensed from foreign companies (%)	7.6	12.4	12.4	4	14.4	48.4	25.6	6	5.3	40.2

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Mali	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	22.5	34.9	28	17.2	39.7	68.4	30.6	22.1	21.4	38.1
Employees receiving formal training (%)	46.4	60.8	52.1	57.6	33.1	n/a	—	46.6	47	—
Experience of the top manager in the sector (years)	12.7	13.2	11.6	11.9	14.8	24.7	15.4	12.6	12.6	13.8

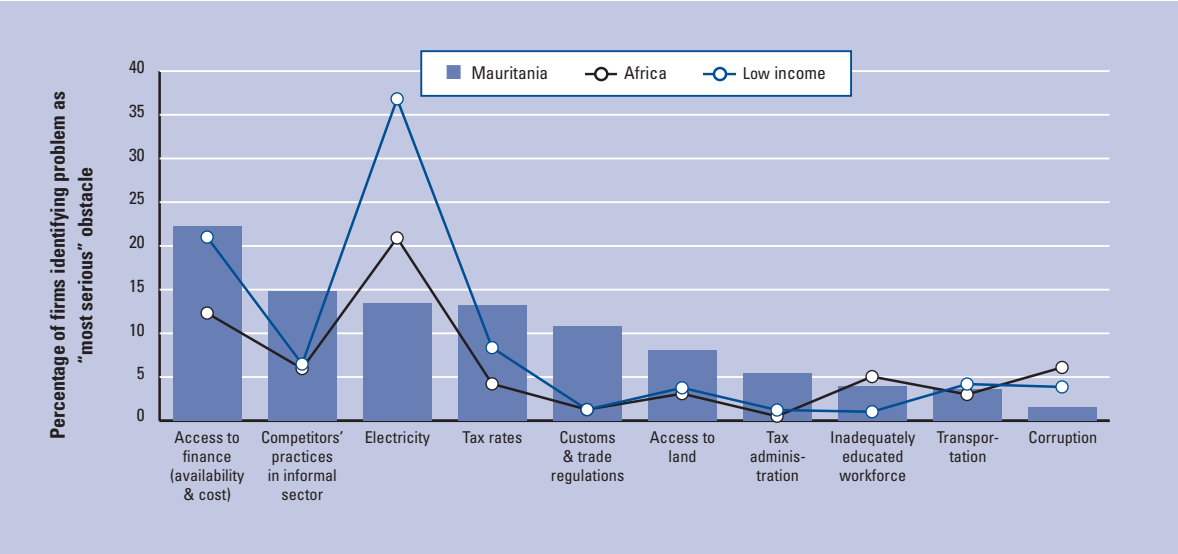
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Mali	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	4.8	5	7.1	5.7	3	—	5.1	—	4.4	—
Average time to claim imports from customs (days)	9.1	7.2	11.3	4.2	13.8	7.2	8.3	9.4	6.7	16
Exporter firms (%)	12.4	15.5	9.1	9.8	19.4	47.4	100	7.4	11.5	25.1
Firms using material inputs and/or supplies of foreign origin (%)	44.4	41.2	50	38	58.6	100	87.1	40.6	41.9	80.5

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Mauritania 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



BUREAUCRACY	MACRO DIMENSION			MICRO DIMENSION						
	Mauritania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	5.8	5.7	4.7	5.5	7.5	—	6.1	5.8	6	4.1
Average number of visits or required meetings with tax officials	1.9	3.1	4.6	2	1.8	—	1.7	2	1.9	2.3
Time to obtain an operating license (days)	10.7	23	19.3	8.7	—	n/a	n/a	10.7	12.5	—
Time to obtain an import license (days)	8.5	26	20.3	14.6	2.8	—	—	9.2	9.1	—

CORRUPTION	MACRO DIMENSION			MICRO DIMENSION						
	Mauritania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	82.1	23.1	43.5	82.1	83.3	—	88.9	81.8	80.9	92.2
Firms expected to give gifts to obtain an electrical connection (%)	39.9	16.4	25.4	37.2	43.8	—	—	39.2	32.9	62.1
Firms expected to give gifts in meetings with tax officials (%)	48.2	10.3	19.4	50.1	40.6	—	46.4	48.3	48.6	45.4
Firms expected to give gifts to secure a government contract (%)	76.2	42.5	49.9	78	71.1	—	57.3	77.2	75.3	83.2
Value of gift expected to secure a government contract (% of contract value)	8.1	3.8	5	7.9	9.1	—	6.7	8.1	8	8.6

COURTS	MACRO DIMENSION			MICRO DIMENSION						
	Mauritania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	48.5	54.6	42.7	45.7	64.9	18.4	45.4	48.7	48.5	48.4

CRIME	MACRO DIMENSION			MICRO DIMENSION						
	Mauritania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	73.6	69.8	57.4	73	73.1	100	74.6	73.5	74.4	67.2
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	5.6	3.2	5.8	5.5	—	n/a	n/a	5.6	5.6	—
Security costs (% of sales)	1.2	2.3	2.9	0.9	2.7	—	1	1.2	1.2	1.4

INFORMALITY	MACRO DIMENSION			MICRO DIMENSION						
	Mauritania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	82.5	46.5	62.5	89.1	56.5	56.5	46.1	84.6	83.2	76.9

2006 Investment Climate Profile Mauritania

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Mauritania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	17.3	25.9	34	16.7	19.5	18.4	13.3	17.5	17.1	18.3

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Mauritania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	16	26.1	16.1	12.1	26.3	76.4	40.9	14.5	15.4	20.6
Internal finance for investment (%)	77.3	73.7	84.3	77.6	76.8	—	—	78.9	77.6	75.9
Bank finance for investment (%)	7.3	19.6	8.4	5.2	11.5	—	—	5.3	5.3	19.1
Owners' contribution, new equity shares (%)	0	0.2	0.5	0	0	—	—	0	0	0
Informal finance for investment (%)	11.6	3.1	4.2	12.9	9.5	—	—	12	12.8	5
Suppliers/customers credit financing (%)	21.5	19.6	15.3	20.4	24.4	41.8	11.1	22.2	21.4	22.6
Loans requiring collateral (%)	95.3	73.6	80.8	96.1	92.1	—	100	94.5	94.5	100
Value of collateral needed for a loan (% of the loan amount)	194.7	109.3	132.2	164.8	292.7	—	—	210.3	200.9	162.6
Firms with annual financial statement reviewed by external auditor (%)	15.6	60.1	35	8.4	38.1	100	27.2	14.9	12.5	39.7

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Mauritania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	3.7	6.8	12.6	3.4	5.3	—	4.3	3.7	3.7	3.8
Value lost due to power outages (% of sales)	1.6	4.1	7.2	1.3	2.6	2.6	1.3	1.6	1.5	2.3
Delay in obtaining an electrical connection (days)	7.5	21.8	25.9	6.1	12.8	—	—	7.7	8.2	5.4
Delay in obtaining a mainline telephone connection (days)	14.5	25.1	28.5	14.2	15.9	—	—	15.3	16.2	7
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.3	1.4	1.6	1.2	0.4	6.5	0.3	1.5	0.9	3.8
Firms using the Web in interaction with clients/suppliers (%)	10.1	28.6	12.8	7.5	17.6	42	40.6	8.2	9.1	17

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Mauritania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	5.9	20.7	9.7	4	10.7	38.2	22.4	4.9	4.4	17
Firms using technology licensed from foreign companies (%)	8	12.4	12.2	9	7.7	0	9.1	7.8	7.9	8.9

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Mauritania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	25.5	34.8	27.8	21.2	28.1	56.5	27.2	25.2	22.8	45.1
Employees receiving formal training (%)	53.8	60.7	51.9	64	39.2	n/a	—	53.1	55.6	—
Experience of the top manager in the sector (years)	11.7	13.2	11.7	11	15	11.5	12.7	11.7	11.8	11

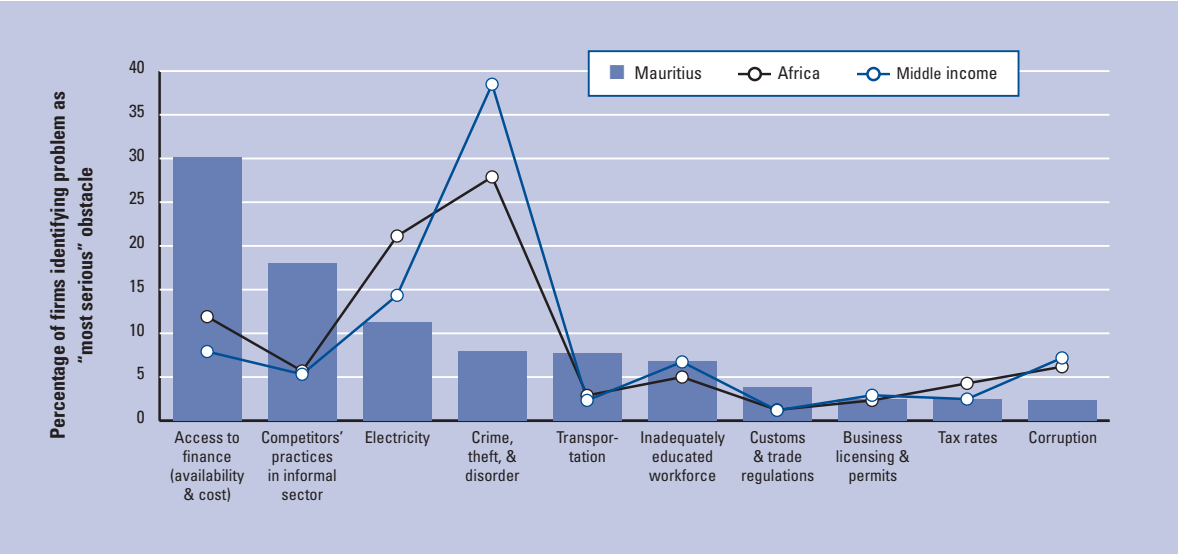
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Mauritania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	3.9	5	7.1	—	4.2	—	4	—	2.1	—
Average time to claim imports from customs (days)	6.7	7.2	11.3	7.4	6.6	—	—	6.3	7.5	3.7
Exporter firms (%)	8.8	15.5	9.2	3.6	25.9	63.3	100	3.3	7.7	16.7
Firms using material inputs and/or supplies of foreign origin (%)	66.8	41.2	49.7	61.9	73.8	80.2	57.6	68.5	64.8	80.8

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Mauritius 2009 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Mauritius	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	9.4	5.6	6	9.4	9.7	7.5	9.4	9.4	9.3	9.8
Average number of visits or required meetings with tax officials	3.1	3.1	1.9	3.2	3.2	2.8	2.5	3.1	3.2	2.6
Time to obtain an operating license (days)	19.1	23.1	30.5	18.7	16.1	—	—	19.3	18.3	—
Time to obtain an import license (days)	22.7	26	29.6	34.5	20.6	14.3	15.7	25.8	25.1	13.2

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Mauritius	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	1.6	23.6	15.6	2.3	0.6	0	0	1.7	1.7	0.5
Firms expected to give gifts to obtain an electrical connection (%)	0.5	16.8	6.8	1	0	0	0	0.6	0.6	—
Firms expected to give gifts in meetings with tax officials (%)	0.3	10.5	3.8	0	1	0	2.1	0	0.4	0
Firms expected to give gifts to secure a government contract (%)	8.8	43.1	29.7	8.4	9.1	9.3	0	9.5	9.3	0
Value of gift expected to secure a government contract (% of contract value)	0.2	3.9	1.7	0.2	0.2	0.1	0	0.2	0.2	0

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Mauritius	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	63.6	54.4	59.4	62.9	65.8	62.7	54	64.3	64.5	51.9

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Mauritius	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	49.5	70.3	75.9	43.5	50	88.3	63.9	48.4	47.3	71.6
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	10.5	3.1	2.4	6.9	14	—	35.4	8.8	11.2	1.9
Security costs (% of sales)	8	2.3	2.1	8.5	7.1	8	8.1	8	8.7	2.6

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Mauritius	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	36.2	46.8	40.9	42.5	26.1	19.8	29.7	36.7	37.6	23

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Mauritius	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	16.9	25.9	23	22.2	9.7	8.6	12.2	17.2	17.8	9.5

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Mauritius	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	47.4	25.5	29.6	41	57.5	64.8	54.7	46.9	47.9	42.1
Internal finance for investment (%)	51.9	74.4	69.4	57.6	47.8	38.3	36.8	53.4	51.1	58.9
Bank finance for investment (%)	30.8	19.3	24.7	33.9	25.1	30.2	37	30.1	30.5	33.3
Owners' contribution, new equity shares (%)	0	0.2	0.1	0	0	0	0	0	0	0
Informal finance for investment (%)	15.8	2.7	2	7.6	24.8	29.2	26.2	14.8	16.9	7
Suppliers/customers credit financing (%)	6.4	19.9	21.9	6.2	6.1	8.3	12.5	6	6.6	5
Loans requiring collateral (%)	81.1	73.3	71.6	85	83.3	61.5	94	80	83.7	52.8
Value of collateral needed for a loan (% of the loan amount)	59.9	111.8	106.4	58.3	58.3	74.3	74.8	58.5	60.6	46.3
Firms with annual financial statement reviewed by external auditor (%)	59.4	60	70.9	46.5	79.3	92.8	80.1	57.9	56.3	89.8

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Mauritius	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	3.6	6.8	2.5	3.8	3.3	2.5	2.4	3.7	3.5	4.2
Value lost due to power outages (% of sales)	2.2	4.1	1.7	2.1	2.8	1	2.3	2.2	2.4	1.4
Delay in obtaining an electrical connection (days)	19.2	21.8	17.4	12.3	29.7	31	33.8	16.4	18.8	—
Delay in obtaining a mainline telephone connection (days)	38.6	24.9	23.5	37.1	42.3	29.3	25.4	40.1	39.8	—
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	0.8	1.4	1.4	0.3	1.8	0.8	0.1	1.1	0.9	0
Firms using the Web in interaction with clients/suppliers (%)	35.9	28.4	35.2	27.9	48.3	64	37.1	35.8	33.5	61

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Mauritius	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	11.1	20.9	25.7	6.8	16	29.4	39.2	9.2	9.6	26
Firms using technology licensed from foreign companies (%)	14.4	12.3	12.4	5.9	19.6	35.6	19.9	12.5	13.6	22.1

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Mauritius	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	25.6	34.9	36.5	15.1	39.4	76.3	47.9	22.6	23.4	54.6
Employees receiving formal training (%)	37.4	60.8	62.2	48	35.8	34.4	40.2	34.6	39.7	—
Experience of the top manager in the sector (years)	17.4	13.1	13.7	15.5	21.1	21.8	22.1	17.1	17.3	19

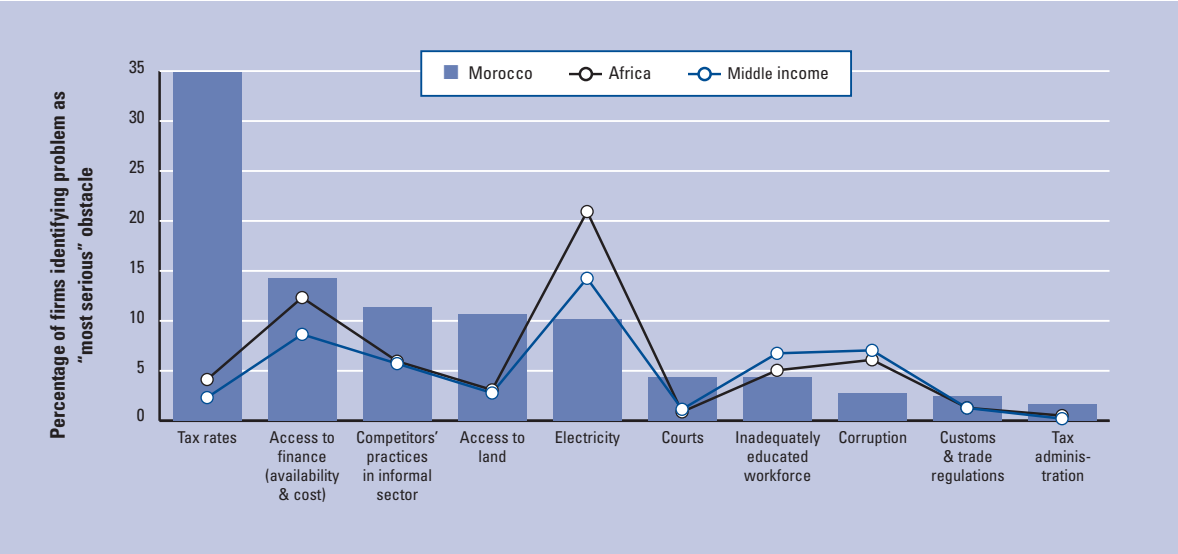
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Mauritius	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	10.3	4.9	4.5	6.3	9.8	15.5	10.6	8.8	10.4	9.8
Average time to claim imports from customs (days)	11.7	7.1	6.1	13.1	11.7	10.8	15.9	8.5	9.3	20
Exporter firms (%)	14.6	15.5	18.2	7.8	27.3	29.9	100	8.1	11.4	47
Firms using material inputs and/or supplies of foreign origin (%)	56.5	41.1	38.9	32.9	81.3	90.2	83.3	47.7	52.4	95.8

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Morocco 2007 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Morocco	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	11.4	5.7	6.1	7.4	12	10.7	9.1	15.2	16.2	9.8
Average number of visits or required meetings with tax officials	5.1	3.1	2	1.1	4.8	5.9	6.8	3.6	3.8	5.8
Time to obtain an operating license (days)	3.4	23.1	30.3	—	2.1	3.8	3.9	2.7	2.6	2.5
Time to obtain an import license (days)	2	25.9	29.3	—	—	—	—	n/a	—	—

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Morocco	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	13.4	23.2	15.2	13.9	14	15.9	16.5	8.3	13	11.6
Firms expected to give gifts to obtain an electrical connection (%)	5	16.6	6.6	—	4.3	8.7	13.6	0	0	0
Firms expected to give gifts in meetings with tax officials (%)	10.7	10.4	3.8	0	12.9	18.4	16.1	21.4	15.4	4.8
Firms expected to give gifts to secure a government contract (%)	9.3	42.8	29.1	11.1	7.7	0	22.2	10.5	18.2	3.3
Value of gift expected to secure a government contract (% of contract value)	0.3	3.8	1.6	0.2	0.2	0	0.4	0.3	0.5	0.1

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Morocco	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	43.5	54.6	59.6	46.2	46.9	35.7	32.9	53.6	46.5	42.9

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Morocco	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	35.9	69.9	75.1	10	29.4	45.5	36.5	54	63	53.5
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	0.4	3.2	2.5	n/a	0.5	0.4	0.4	—	—	0.3
Security costs (% of sales)	1	2.3	2.1	1.1	1.2	0.8	0.8	1	0.8	1

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Morocco	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	n/a	46.5	40.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Morocco	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	13.1	25.9	22.9	8.8	13.9	16.6	16.8	9.5	9.3	10.8

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Morocco	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	33.4	26	30.2	20	28.2	41.9	35.9	43.8	53.7	27.1
Internal finance for investment (%)	75.4	73.7	68.6	90.3	80.7	71.5	73.7	71	66.9	82
Bank finance for investment (%)	12.2	19.6	25	5	10.2	11.7	9.6	23.7	21.9	7.5
Owners' contribution, new equity shares (%)	1.1	0.2	0.1	0.3	0.2	2	0.2	1.7	0.7	0.3
Informal finance for investment (%)	5.6	3.1	2.5	1.3	3.8	6.7	5.6	2.8	3.1	6.7
Suppliers/customers credit financing (%)	9.7	19.6	21.5	10.6	12.3	6.1	7	8	11.2	9.1
Loans requiring collateral (%)	89.6	73.6	72	93.8	89.7	96	93.8	82.1	86.2	84.6
Value of collateral needed for a loan (% of the loan amount)	169.4	109.1	103.4	127.3	163.2	195.6	194.5	157.8	173.1	165.5
Firms with annual financial statement reviewed by external auditor (%)	19.4	60.1	70.7	3.8	12.4	27.5	19.4	28.6	34	30.8

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Morocco	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	2.5	6.8	2.5	2	2.5	2.5	2.3	2.2	2.5	2.3
Value lost due to power outages (% of sales)	1.3	4.1	1.7	1.2	1.6	1.1	1.7	1.3	1.2	1.6
Delay in obtaining an electrical connection (days)	18.8	21.7	17.4	—	21.7	19.3	13.9	19.5	20.5	12
Delay in obtaining a mainline telephone connection (days)	6.4	25.2	23.9	9.6	8.7	4.9	5	5.7	6	8.9
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	0.3	1.4	1.4	1	0.3	0.1	0.2	0.1	0.5	0
Firms using the Web in interaction with clients/suppliers (%)	38	28.6	35.3	10.1	22.9	48.3	40	57.8	50	55.2

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Morocco	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	17.3	20.7	25.2	5	15.1	23.6	13.2	40.4	22.7	33.6
Firms using technology licensed from foreign companies (%)	12.8	12.3	12.4	9	12.3	15.3	11.2	17.6	16.7	24.3

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Morocco	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	24.7	34.8	36.3	8.8	20.6	36.2	27.5	42.9	40	43.4
Employees receiving formal training (%)	35.2	60.8	62.1	26.5	33.6	37.3	33.9	33.7	24.1	48.6
Experience of the top manager in the sector (years)	21.1	13.2	13.8	22.1	22	21.4	20.8	22.6	22	18.8

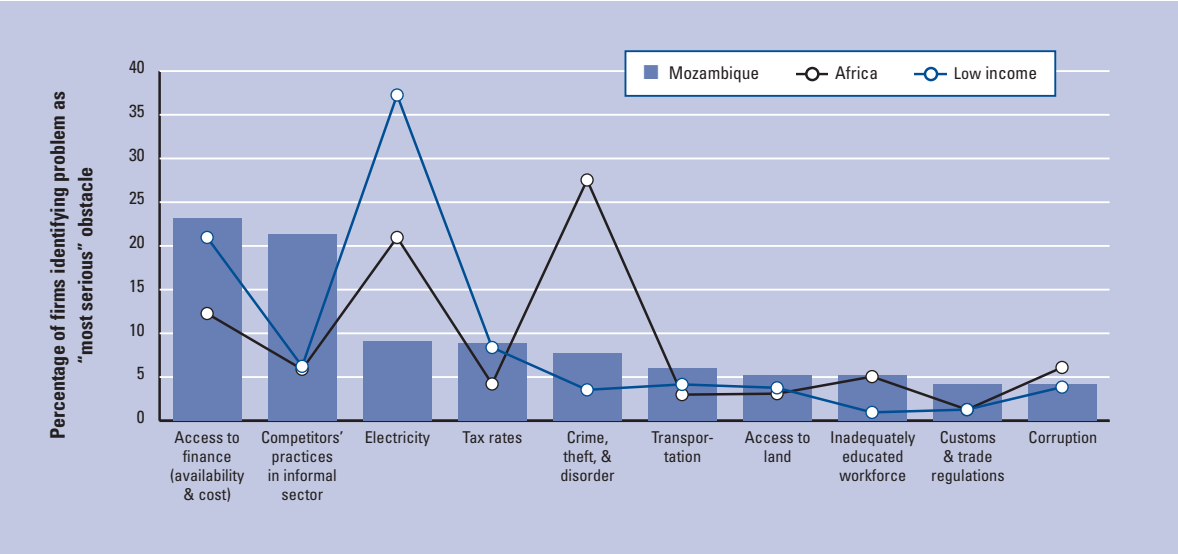
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Morocco	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	1.8	5	4.7	1.2	1.7	1.9	1.7	3.2	1.5	2
Average time to claim imports from customs (days)	3.8	7.2	6.3	3.5	4.2	3.4	2.5	5.2	3.5	2.8
Exporter firms (%)	89.8	15.4	18	85.7	88.3	97.1	100	54.8	50	92.5
Firms using material inputs and/or supplies of foreign origin (%)	92.4	41	38.9	69.6	92.3	98.8	97.4	90.6	72	95.7

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Mozambique 2007 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Mozambique	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	3.3	5.7	4.8	2.7	4.5	4.3	4.3	3.3	3	4.5
Average number of visits or required meetings with tax officials	2.7	3.1	4.7	2.8	2.5	2.3	2.4	2.7	2.6	2.7
Time to obtain an operating license (days)	35.2	22.9	19.1	41.2	34.3	15.3	35.6	35.2	38.1	25.6
Time to obtain an import license (days)	12.3	26.1	20.5	11.9	13.3	11.4	10.1	12.6	12.7	11.9

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Mozambique	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	14.8	23.2	44.5	13	17.4	19.5	46.4	12.9	14.6	15.7
Firms expected to give gifts to obtain an electrical connection (%)	14.6	16.5	25.6	12.7	5.5	29.1	—	15.3	14.6	14.6
Firms expected to give gifts in meetings with tax officials (%)	9.8	10.4	19.8	11.9	7.5	4.1	4.7	10.2	9.4	11.3
Firms expected to give gifts to secure a government contract (%)	31.6	42.8	50.3	42.1	28.4	22.4	33.1	31.4	23.1	44.1
Value of gift expected to secure a government contract (% of contract value)	2.4	3.8	5	3.9	2.2	0.6	3.3	2.2	1.8	3.2

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Mozambique	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	16.6	54.8	43.3	17.6	18	4.6	0	17.6	17.2	14.2

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Mozambique	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	34.7	70	58	24.1	46.9	70.9	93.9	31	30.9	48.8
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	5	3.2	5.8	5.5	5.7	2.1	6.5	4.9	5.4	3.4
Security costs (% of sales)	4.3	2.3	2.9	4.5	2.9	7.1	8.4	3.8	3.2	7.4

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Mozambique	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	73.1	46.4	62.4	77.8	65.7	62.8	55.5	74.1	75.7	63.6

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Mozambique	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	24.4	25.9	34.1	19.9	28.3	43.4	25.4	24.4	23.5	28

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Mozambique	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	14.2	26.1	16.1	6.5	16.3	60.9	51.2	11.9	10.5	27.6
Internal finance for investment (%)	86	73.7	84.3	91	86	74.1	81.9	86.5	88.3	80.8
Bank finance for investment (%)	4.7	19.7	8.4	1.1	5.9	11.5	9	4.2	3.7	7
Owners' contribution, new equity shares (%)	0.2	0.2	0.5	0	0	1	0	0.2	0.3	0
Informal finance for investment (%)	2.1	3.1	4.2	0.4	1.1	7.3	0	2.3	0.8	5.1
Suppliers/customers credit financing (%)	16.4	19.6	15.3	14.6	19.3	19.3	17.4	16.3	15.7	18.9
Loans requiring collateral (%)	90.6	73.6	80.7	84.3	88.3	97.2	90.3	90.7	91	89.9
Value of collateral needed for a loan (% of the loan amount)	98.6	109.5	133.4	86.1	106.4	100.9	113.4	94.2	97.1	100.6
Firms with annual financial statement reviewed by external auditor (%)	43.1	60.1	34.8	27.7	63.2	87.3	87.9	40.3	37.8	62.5

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Mozambique	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	3.1	6.8	12.6	3.1	3.1	3	2.5	3.1	3.1	3
Value lost due to power outages (% of sales)	2.4	4.1	7.2	2.6	2.2	2	1.9	2.5	2.5	2
Delay in obtaining an electrical connection (days)	12.7	21.8	25.9	15.3	9.2	13.2	—	12.9	15.9	10
Delay in obtaining a mainline telephone connection (days)	10.7	25.1	28.5	26.6	5.9	—	—	11	14.5	5.1
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.2	1.4	1.7	1.1	1.4	0.4	0.8	1.2	1.2	1.1
Firms using the Web in interaction with clients/suppliers (%)	13.7	28.7	12.7	7.1	19.2	42.2	40.7	12	7	37.9

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Mozambique	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	18.7	20.7	9.5	15.6	21.4	34.5	39.6	17.7	14.6	35.6
Firms using technology licensed from foreign companies (%)	33.6	12.2	11.2	28.5	41.3	59.6	59.6	31.9	27.7	60.1

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Mozambique	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	22.1	34.9	28	11.7	31.2	66	89.4	17.8	17.6	38.6
Employees receiving formal training (%)	63.9	60.7	51.4	69.4	58.8	63.3	52.3	67.8	68.1	54.6
Experience of the top manager in the sector (years)	17.3	13.2	11.5	16.3	17.4	24	19	17.2	17.6	16.3

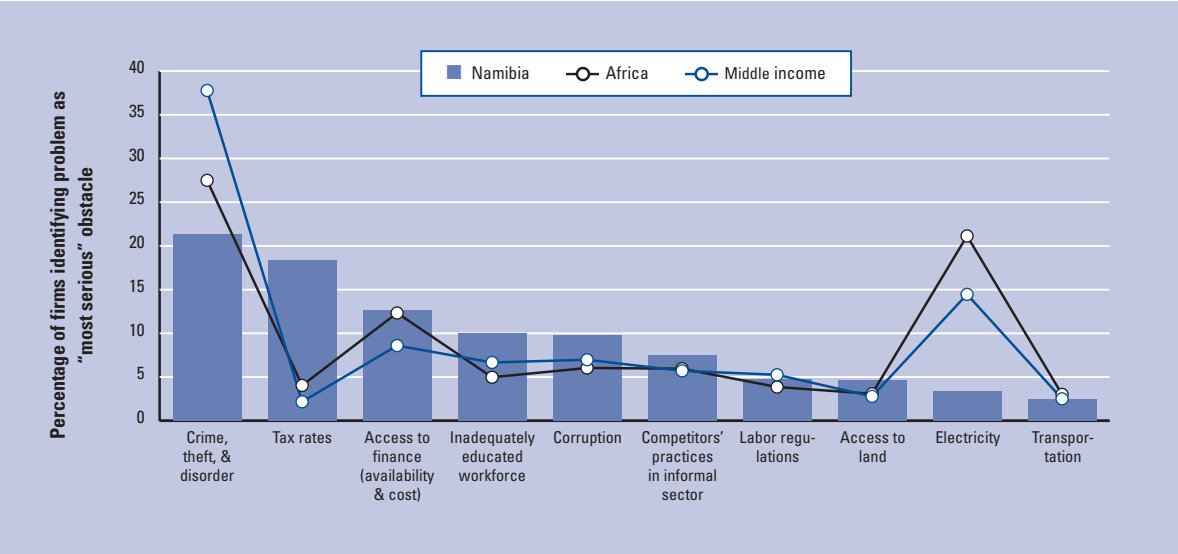
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Mozambique	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	10.1	5	7	—	13.8	5.9	10.2	—	12.8	7.8
Average time to claim imports from customs (days)	10.4	7.1	11.3	8	12.1	9.9	13.1	9.4	11.5	9.1
Exporter firms (%)	6.1	15.5	9.3	1.2	9.5	29.9	100	0.2	3.5	15.7
Firms using material inputs and/or supplies of foreign origin (%)	29.2	41.3	50.7	18.6	46	79.5	85.3	25.6	22.7	58.5

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Namibia 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Namibia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	2.9	5.7	6.2	2.4	4.1	6	6.3	2.8	2.8	3
Average number of visits or required meetings with tax officials	1.6	3.1	2	1.5	1.5	3.8	5.7	1.5	1.5	1.9
Time to obtain an operating license (days)	9.6	23.4	32.1	8.9	11.8	9.2	5.4	9.9	9.6	10
Time to obtain an import license (days)	16.4	26.1	29.8	13.1	22.3	7.3	19.2	16	20.1	9.1

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Namibia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	11.4	23.3	15.3	12.4	9	2.8	23.4	11	13.8	3.3
Firms expected to give gifts to obtain an electrical connection (%)	0	16.7	6.8	0	0	0	0	0	0	0
Firms expected to give gifts in meetings with tax officials (%)	2.6	10.5	3.8	0.4	6.4	0	0	2.7	0.3	10.2
Firms expected to give gifts to secure a government contract (%)	8.1	44.5	32.4	9	5.7	0	0	8.3	10.7	0
Value of gift expected to secure a government contract (% of contract value)	0.5	4	1.8	0.6	0.4	0	0	0.5	0.7	0

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Namibia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	66.1	54.4	59.4	65.1	67.7	82	76.5	65.7	65.3	68.9

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Namibia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	79.3	69.6	74.8	75.2	91.2	100	96.1	78.8	77.5	85.8
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	3	3.2	2.5	3	3.1	0.7	0.2	3	3.1	2.7
Security costs (% of sales)	1.2	2.3	2.1	1.3	1.2	0.4	0.1	1.3	1.3	1.1

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Namibia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	45.5	46.5	40.7	48.5	37.9	20.6	24.3	46.2	46.6	41.4

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Namibia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	33.4	25.7	22.7	36.6	21.9	31.4	34.9	33.3	35.3	26.3

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Namibia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	24	26.1	30.4	23.6	24.6	30.3	25	24	26.4	15.7
Internal finance for investment (%)	79.2	73.6	68.5	82.8	71.3	63.1	69.1	79.6	78.2	82.6
Bank finance for investment (%)	15.6	19.7	25.1	11	27	29.1	21.9	15.4	15.3	16.8
Owners' contribution, new equity shares (%)	0	0.2	0.1	0	0	0	0	0	0	0
Informal finance for investment (%)	3.6	3.1	2.6	4.3	1	7.8	7.3	3.4	4.6	0
Suppliers/customers credit financing (%)	27.9	19.5	21.3	26.4	33.7	23.2	28.5	27.9	28.5	26.1
Loans requiring collateral (%)	71.1	73.7	72.1	77.5	46.3	100	100	70.2	74.4	51.8
Value of collateral needed for a loan (% of the loan amount)	219	108.1	102.1	243.5	101.1	123.6	113.6	224.4	218.8	222
Firms with annual financial statement reviewed by external auditor (%)	79.8	59.7	70.3	77.1	87.4	97	74.3	80	79.8	79.8

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Namibia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	1.7	6.8	2.5	1.8	1.5	—	1.4	1.7	1.9	1.3
Value lost due to power outages (% of sales)	0.7	4.1	1.7	0.6	0.9	0.2	0	0.7	0.7	0.6
Delay in obtaining an electrical connection (days)	9.2	21.9	17.6	5.5	13.4	19.5	23.1	8.1	9.1	9.3
Delay in obtaining a mainline telephone connection (days)	7.3	25.4	24.2	7.6	4.2	16	7.8	7.3	6.8	8.9
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.3	1.4	1.4	1.3	1.7	0.7	0.1	1.6	1.6	0.4
Firms using the Web in interaction with clients/suppliers (%)	23.2	28.7	35.5	16.4	45.6	33.9	33	22.9	17.1	44.9

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Namibia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	17.6	20.7	25.3	12.2	32.2	50.9	27.5	17.3	11.8	37.9
Firms using technology licensed from foreign companies (%)	18.5	12.3	12.4	18.2	17	23.7	21.6	17.8	17.3	21.8

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Namibia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	44.5	34.8	36.3	33.5	43.7	92.1	74.4	37.8	39.5	58.5
Employees receiving formal training (%)	66	60.7	62	77.2	49.3	70.2	72.4	64	65.1	68
Experience of the top manager in the sector (years)	9.9	13.3	13.9	9.1	12.5	13.7	17.3	9.7	10.1	9.5

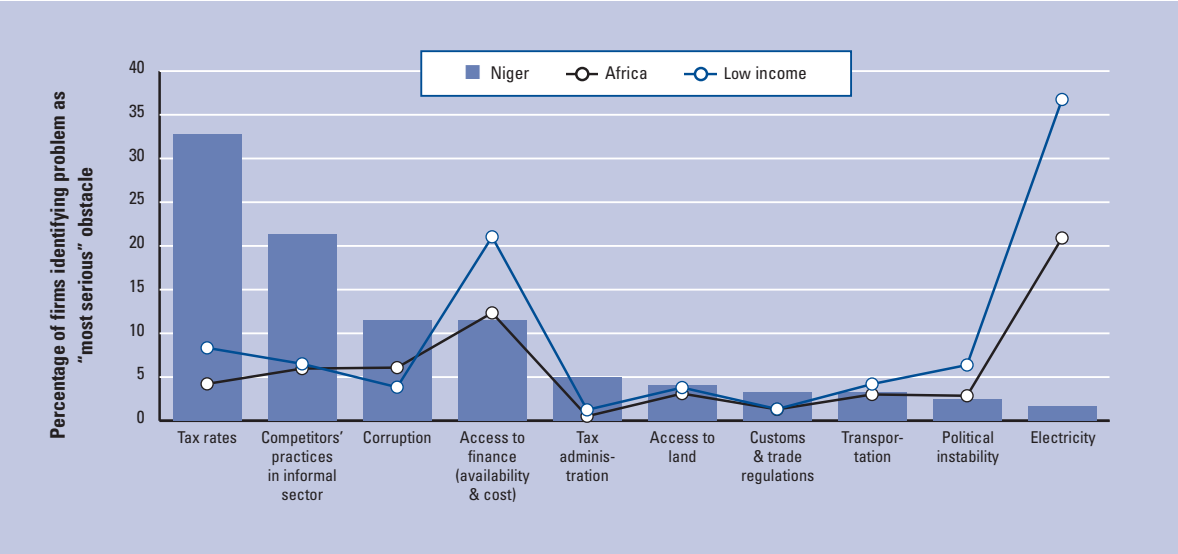
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Namibia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	1.5	5	4.7	1.2	1.1	2.5	1.8	1	1.4	1.7
Average time to claim imports from customs (days)	3.3	7.2	6.2	3.6	3.1	2.6	2.2	3.5	3.6	2.4
Exporter firms (%)	9.2	15.6	18.3	6.9	12	53.9	100	6.3	8.2	12.5
Firms using material inputs and/or supplies of foreign origin (%)	83	41.2	39	76.9	95.1	76.3	83.4	82.9	80.8	89.4

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Niger 2005 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Niger	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	11.5	5.7	4.7	8.6	17.2	—	11.5	11.4	10.9	13.5
Average number of visits or required meetings with tax officials	4.3	3.1	4.6	2.9	7.9	—	9.7	3.2	3.2	8.8
Time to obtain an operating license (days)	10.9	23	19.3	10.4	12.3	n/a	11.9	10.7	9.9	—
Time to obtain an import license (days)	4.9	26.1	20.4	4.8	4.9	—	6	4.7	5.2	3.6

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Niger	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	69.7	23.2	43.7	71.4	68.2	—	72.7	69.1	71.7	61.5
Firms expected to give gifts to obtain an electrical connection (%)	20.8	16.5	25.5	23.5	14.3	n/a	—	22.7	25	—
Firms expected to give gifts in meetings with tax officials (%)	17	10.4	19.6	15.5	20	n/a	21.1	15.9	14.5	26.3
Firms expected to give gifts to secure a government contract (%)	80	42.7	50.1	78.7	84.6	n/a	66.7	82.4	80	80
Value of gift expected to secure a government contract (% of contract value)	12.7	3.8	5	13.6	9.6	n/a	9.4	13.3	12.4	14.4

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Niger	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	35.7	54.6	42.8	31.6	42.4	—	44.4	34	39.3	21.7

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Niger	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	86.4	69.8	57.5	82.6	94.3	—	90.5	85.6	83.8	96.2
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	6.1	3.2	5.8	—	6	—	—	6.8	9.1	1.8
Security costs (% of sales)	0.8	2.3	2.9	0.6	1.4	—	0.2	1	1	0.3

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Niger	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	29.7	46.5	62.8	35.1	20	—	21.1	31.5	31.5	22.7

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Niger	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	10	25.9	33.9	10.8	9.1	—	0	12.1	9.6	11.5

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Niger	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	48	26	16	40.7	71.4	—	57.1	46.2	49.5	42.3
Internal finance for investment (%)	87	73.7	84.3	95.5	70.1	—	78.9	88.9	90.1	75.2
Bank finance for investment (%)	11.6	19.6	8.4	3.1	28.1	—	17.4	10.2	9.8	18.1
Owners' contribution, new equity shares (%)	0	0.2	0.5	0	0	—	0	0	0	0
Informal finance for investment (%)	1.3	3.1	4.2	1.1	1.7	—	3.7	0.7	0.1	6
Suppliers/customers credit financing (%)	5.4	19.6	15.3	5.6	1.8	—	15	3.4	3.9	11.1
Loans requiring collateral (%)	83.1	73.7	80.8	79.4	88	n/a	75	85.1	87.5	63.6
Value of collateral needed for a loan (% of the loan amount)	105.5	109.4	132.8	107	103	n/a	123	100.7	111.6	74.2
Firms with annual financial statement reviewed by external auditor (%)	56.8	60	34.9	51.2	65.7	—	66.7	54.8	50.5	80.8

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Niger	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	20.7	6.7	12.5	23.7	12.7	—	12.3	22.3	17	34
Value lost due to power outages (% of sales)	2.5	4	7.2	1.9	3.8	—	2.9	2.4	2.4	2.8
Delay in obtaining an electrical connection (days)	20.6	21.7	25.8	23.1	13	n/a	—	17.5	24.2	—
Delay in obtaining a mainline telephone connection (days)	60.1	25.1	28.2	70.5	40.4	n/a	22.8	68.7	34.7	136.4
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	2	1.4	1.6	2.2	1.7	—	2.5	2	1.4	4.8
Firms using the Web in interaction with clients/suppliers (%)	18.4	28.6	12.7	15.1	28.6	—	14.3	19.2	18.2	19.2

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Niger	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	4.8	20.7	9.7	0	13	—	0	5.5	3.9	8.3
Firms using technology licensed from foreign companies (%)	10.3	12.3	12.2	9.1	9.1	—	12.5	10	8.7	16.7

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Niger	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	34.4	34.8	27.7	22.1	57.1	—	42.9	32.7	30.3	50
Employees receiving formal training (%)	n/a	60.7	51.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Experience of the top manager in the sector (years)	18.2	13.2	11.7	17.8	19.1	—	17.9	18.3	18.6	16.7

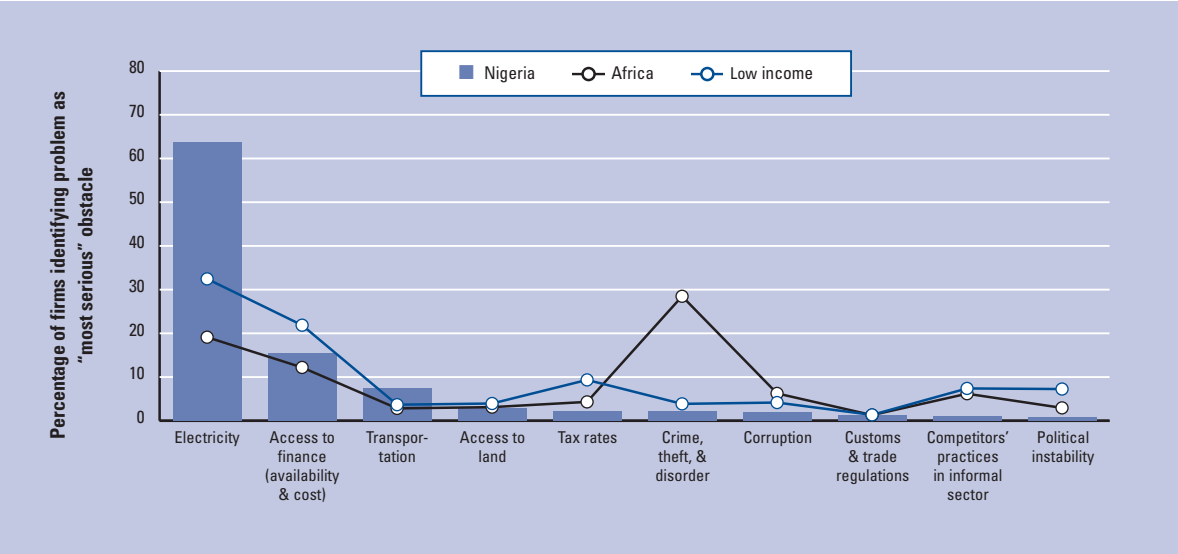
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Niger	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	7.4	5	7	4.2	21	—	8.6	—	7.8	6.6
Average time to claim imports from customs (days)	6.9	7.2	11.3	7.4	5.7	—	3.8	7.6	6.8	7.3
Exporter firms (%)	23.2	15.5	9.2	23.3	22.9	—	100	7.7	22.2	26.9
Firms using material inputs and/or supplies of foreign origin (%)	77.6	41.2	49.7	76.7	77.1	—	95.2	74	78.8	73.1

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Nigeria 2007 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Nigeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	6.1	5.7	4.5	5.4	7.8	12.7	10.7	6	6	7.8
Average number of visits or required meetings with tax officials	3.7	3	4.8	3.7	3.7	3	3.6	3.7	3.7	3
Time to obtain an operating license (days)	12.8	23.9	20.2	11.8	15.3	10.3	17.8	12.7	12.8	7.6
Time to obtain an import license (days)	25.8	25.9	19.7	34.2	17.2	14	11.6	27.5	25.9	—

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Nigeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	40.9	22.4	44.3	42	39.9	15.2	15	41.2	40.9	46.5
Firms expected to give gifts to obtain an electrical connection (%)	39.3	12.3	19.6	42.3	32.4	9.7	7.8	39.7	39.2	56.9
Firms expected to give gifts in meetings with tax officials (%)	22.9	9.6	19.1	23.9	21.3	7.2	11.7	23	22.8	25.4
Firms expected to give gifts to secure a government contract (%)	44.6	42.4	51.9	47.1	38.6	17.2	13.2	45	44.5	55.2
Value of gift expected to secure a government contract (% of contract value)	4.6	3.7	5.2	4.9	4.2	1.9	1.8	4.7	4.6	4.8

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Nigeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	53.5	54.6	41.1	52.1	57.9	58.9	57.5	53.4	53.5	47.5

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Nigeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	69.4	69.8	55.7	64.5	84.1	98.5	88	69.1	69.1	100
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	4.1	3.2	6	4.9	3.1	0.6	4.3	4.1	4.1	1.3
Security costs (% of sales)	2.6	2.3	2.9	2.8	2.2	2	1.9	2.6	2.6	2.6

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Nigeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	68	45.6	61.7	68.1	66.9	74.1	83.1	67.8	67.9	80.8

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Nigeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	20	26.1	36.3	22.2	13.5	1.5	11.7	20.1	20.1	0

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Nigeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	3.8	27	17.9	2.9	6	14.7	5.2	3.8	3.6	23.2
Internal finance for investment (%)	92.8	72.9	83.1	92.8	92.2	94.5	93.3	92.7	93	76
Bank finance for investment (%)	1.3	20.4	9.4	1.1	1.6	4.6	3.9	1.3	1.1	12.5
Owners' contribution, new equity shares (%)	0.1	0.2	0.5	0	0.2	0	0	0.1	0.1	0
Informal finance for investment (%)	3.8	3.1	4.3	4	3.6	0	0	3.8	3.7	5.7
Suppliers/customers credit financing (%)	24.9	19.4	13.8	24.4	25.4	35.6	29.1	24.9	24.9	23.1
Loans requiring collateral (%)	78.8	73.6	80.9	83.7	69.7	80.8	—	78.5	77.7	—
Value of collateral needed for a loan (% of the loan amount)	138.8	109.3	132.5	146.1	104.2	194.4	—	140.4	137.6	—
Firms with annual financial statement reviewed by external auditor (%)	17	61.8	37.7	8.9	38.8	86.8	76.4	16.2	16.5	77.7

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Nigeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	26.7	5.3	9.8	26.6	27.1	29.5	27	26.7	26.7	32.8
Value lost due to power outages (% of sales)	8.9	3.7	6.8	9.1	8.5	6.8	4	9	8.9	9.8
Delay in obtaining an electrical connection (days)	7.7	24.3	33.3	8	6.5	6.3	8.4	7.6	7.7	—
Delay in obtaining a mainline telephone connection (days)	7.6	26	32.6	8	7.2	4.5	4.2	7.6	7.6	5.5
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	3.2	1.3	1.3	2.5	4.6	7.4	4	3.2	3.3	1.5
Firms using the Web in interaction with clients/suppliers (%)	9.7	29.4	13.2	4.2	22.6	73.5	64.9	9	9.3	48.7

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Nigeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	8.5	21.1	9.9	4.3	18.2	63.7	67.7	7.7	8.1	51.1
Firms using technology licensed from foreign companies (%)	10.6	12.4	12.5	7.2	13.9	43.5	49.4	9.7	10.2	49.9

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Nigeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	25.7	35	28	20	35.4	56.4	89.1	24.1	25.3	60.6
Employees receiving formal training (%)	44.4	60.9	52.7	47.9	41.4	38.9	43.6	44.5	44.1	—
Experience of the top manager in the sector (years)	10	13.3	11.9	9.6	10.6	17.8	13.4	9.9	10	13.6

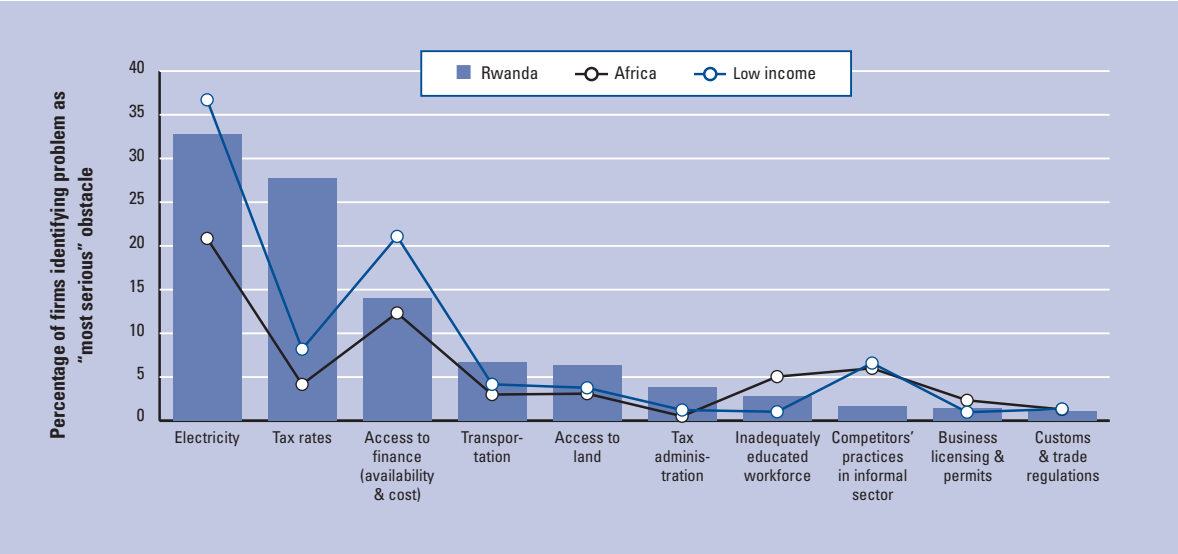
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Nigeria	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	7.5	5	7	3.5	6	14	7.5	n/a	7.6	—
Average time to claim imports from customs (days)	12.8	7.1	11.2	21.6	10	11.7	6.1	15.8	13	—
Exporter firms (%)	2	16	10.3	1	4.2	14.1	100	0.7	1.9	7.1
Firms using material inputs and/or supplies of foreign origin (%)	28.1	41.6	53.5	32.1	16.4	34	80.6	26.7	27.9	44.4

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Rwanda 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



BUREAUCRACY	MACRO DIMENSION			MICRO DIMENSION						
	Rwanda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	5.9	5.7	4.7	6	5.6	6.3	8	5.7	5.9	6
Average number of visits or required meetings with tax officials	3.9	3.1	4.6	4.3	3.7	1.7	2.5	4.1	3.8	4.6
Time to obtain an operating license (days)	6.5	23.1	19.4	8.6	2.2	—	2.2	6.8	7.3	3.5
Time to obtain an import license (days)	7.4	26.1	20.5	13.2	4.9	2.7	2.6	8.9	11.5	3.7

CORRUPTION	MACRO DIMENSION			MICRO DIMENSION						
	Rwanda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	20	23.2	44.1	21.5	16.2	19.9	52.3	17.4	17.3	31.7
Firms expected to give gifts to obtain an electrical connection (%)	0	16.5	25.5	0	—	n/a	n/a	0	0	—
Firms expected to give gifts in meetings with tax officials (%)	4.9	10.5	19.8	7.1	1.3	0	4.8	4.9	4.8	5.2
Firms expected to give gifts to secure a government contract (%)	14.4	43.1	50.9	12.8	18.6	13.3	46.8	12	12.1	24
Value of gift expected to secure a government contract (% of contract value)	0.9	3.9	5.1	0.9	1.1	0.5	2.6	0.8	0.8	1.5

COURTS	MACRO DIMENSION			MICRO DIMENSION						
	Rwanda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	67.1	54.6	42.5	58.5	76	100	83.3	65.6	63.7	82.4

CRIME	MACRO DIMENSION			MICRO DIMENSION						
	Rwanda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	73.7	69.8	57.3	70.5	76.4	86.8	88.7	72.3	72.6	78.6
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	7.1	3.2	5.7	9.2	1.1	—	—	7.3	7.9	—
Security costs (% of sales)	1.6	2.3	2.9	1.9	1.2	0.9	1.5	1.6	1.6	1.5

INFORMALITY	MACRO DIMENSION			MICRO DIMENSION						
	Rwanda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	28.9	46.6	63.1	38	14.1	9.1	9.5	30.6	32.4	12.5

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Rwanda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	41	25.8	33.8	43.5	41.4	20.5	45.1	40.6	41.6	38.2

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Rwanda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	37.6	26	15.8	22	62.9	65.9	57.3	35.7	35.6	46.6
Internal finance for investment (%)	74.1	73.7	84.5	78.9	61.1	69.1	73.8	74.1	74.1	74.2
Bank finance for investment (%)	18.2	19.6	8.2	11.2	37.2	25	21.2	18	18	19.2
Owners' contribution, new equity shares (%)	0	0.2	0.5	0	0	0	0	0	0	0
Informal finance for investment (%)	5.7	3.1	4.2	7.6	1.6	0	0	6	6	4.1
Suppliers/customers credit financing (%)	14.9	19.6	15.3	14.1	17.4	12.7	12.1	15.1	13.8	19.6
Loans requiring collateral (%)	96.7	73.6	80.4	96.2	100	88.3	100	96.2	98.2	91.4
Value of collateral needed for a loan (% of the loan amount)	160.4	109.1	131.8	176.9	141.3	181.8	117.2	166.7	168.1	126.5
Firms with annual financial statement reviewed by external auditor (%)	40.1	60.1	34.9	29.1	51.6	78.6	51.8	39	36.1	58.1

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Rwanda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	13.7	6.7	12.5	11.8	15.9	17.4	18.2	13.2	13.4	14.6
Value lost due to power outages (% of sales)	8.7	4	7.2	8.7	7.6	11.5	6.8	8.8	9.2	7
Delay in obtaining an electrical connection (days)	18.2	21.7	25.8	18.7	—	n/a	n/a	18.2	19.7	—
Delay in obtaining a mainline telephone connection (days)	61.7	25	28.1	75.6	12.4	n/a	—	63.1	28.6	188.1
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.5	1.4	1.6	0.4	2.1	1.7	1.1	1.6	1.9	0.3
Firms using the Web in interaction with clients/suppliers (%)	18.1	28.6	12.7	10.7	26.4	42.3	51.3	15	12.8	41.7

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Rwanda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	10.8	20.7	9.7	8.5	8.3	33.7	20.9	9.9	7.5	25.7
Firms using technology licensed from foreign companies (%)	1.3	12.4	12.3	0	0	5.2	0	1.6	1.7	0

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Rwanda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	27.6	34.8	27.8	7.7	22.7	58.6	39.6	24.6	23.1	43.3
Employees receiving formal training (%)	44.2	60.7	52	n/a	55.4	32.6	—	46.2	46.1	—
Experience of the top manager in the sector (years)	10.3	13.2	11.7	8.8	12.2	14.7	11.3	10.2	9.3	14.5

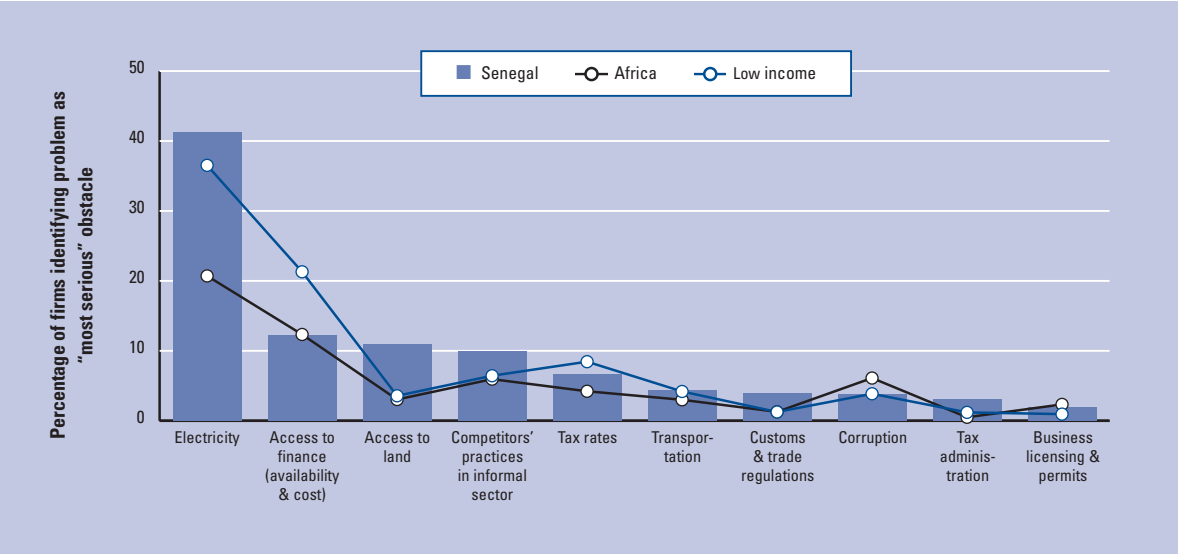
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Rwanda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	6.7	5	7	—	7.2	6.4	7.3	—	9.8	3.5
Average time to claim imports from customs (days)	12.7	7.1	11.2	—	11	9.6	13.2	12.6	14.8	7.4
Exporter firms (%)	12.1	15.5	9.2	1.3	18.2	65.4	100	3.9	8.4	28.7
Firms using material inputs and/or supplies of foreign origin (%)	73.8	41.2	49.6	67.6	78.4	72.4	67.6	75.3	70.8	84.2

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Senegal 2007 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Senegal	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	2.9	5.7	4.8	2.5	3.8	6.4	5.2	2.7	2.8	4.1
Average number of visits or required meetings with tax officials	1.8	3.1	4.7	1.7	1.7	2.6	3.1	1.6	1.7	2.3
Time to obtain an operating license (days)	21.4	23	19.2	21.5	25.6	—	23.1	21.1	22.6	—
Time to obtain an import license (days)	21.1	26	20.1	23.8	17.4	17.4	18.2	22.2	24	9.5

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Senegal	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	18.1	23.2	44.7	15.8	25.5	37.6	28.6	17.1	17.5	27.3
Firms expected to give gifts to obtain an electrical connection (%)	3.5	16.7	26.2	3.5	3.9	—	0	3.8	3.5	—
Firms expected to give gifts in meetings with tax officials (%)	18.7	10.3	19.7	18.6	21.3	12.4	21.4	18.4	18.5	20.8
Firms expected to give gifts to secure a government contract (%)	36.3	42.7	50.2	33.5	30.9	—	76.1	19.4	35.6	39.4
Value of gift expected to secure a government contract (% of contract value)	3	3.8	5	1.1	6.4	—	4.6	2.2	1.8	8.3

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Senegal	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	55.4	54.6	42.4	55.6	52.4	63.3	75.1	53.6	54.9	63.9

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Senegal	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	60.1	69.9	57.4	53.9	85.8	91.4	85.8	57.7	58.6	84.2
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	4.1	3.2	5.8	5	2	1.4	2.7	4.5	4.2	—
Security costs (% of sales)	1.2	2.3	2.9	1.2	1.2	1.7	1.7	1.2	1.2	1.7

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Senegal	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	21.6	46.8	64.3	20.1	32.3	14.1	36	20.3	22	16.5

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Senegal	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	26.3	25.8	34.1	25.5	30.7	26.7	20.1	26.9	26.1	29.6

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Senegal	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	15.3	26.2	16.1	10.8	28	55.5	35.7	13.3	13.9	36.7
Internal finance for investment (%)	72.7	73.7	84.5	74.9	81.1	24	62.6	74.9	77	39.1
Bank finance for investment (%)	11.1	19.6	8.3	9	7	45.3	19	9.4	8.2	33.7
Owners' contribution, new equity shares (%)	3.9	0.2	0.4	5.5	0.3	0	0.5	4.6	4.4	0
Informal finance for investment (%)	9.4	3.1	4.1	7.7	10	23.6	14.6	8.3	7.7	22.7
Suppliers/customers credit financing (%)	14.8	19.7	15.3	14.1	18.3	16	18.9	14.4	14.6	18
Loans requiring collateral (%)	89.1	73.6	80.6	85.5	90.5	100	100	86.4	88.8	91.2
Value of collateral needed for a loan (% of the loan amount)	128.8	109.3	132.8	129.7	120	140.6	139.6	125.6	125.7	147.1
Firms with annual financial statement reviewed by external auditor (%)	25.8	60.3	35.2	16.3	59.6	91.2	65.2	22.1	22.7	75.4

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Senegal	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	11.8	6.7	12.5	11.7	11.9	12.5	17.2	11.3	11.5	15.1
Value lost due to power outages (% of sales)	5	4	7.3	5	4.8	5.7	5.5	4.9	5	5.3
Delay in obtaining an electrical connection (days)	9.4	22	26.4	9.6	8.5	—	11.2	9.3	9.5	—
Delay in obtaining a mainline telephone connection (days)	8.9	25.3	29	8.5	7	17.7	15.8	8	8.3	—
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.4	1.4	1.6	1.2	1.9	1.2	1.5	1.3	1.4	1
Firms using the Web in interaction with clients/suppliers (%)	14.6	28.7	12.7	7.5	43.5	49.8	32.7	12.9	13	39.2

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Senegal	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	6.1	20.8	9.8	2.5	17.6	39.7	24.3	4.5	4.8	26.9
Firms using technology licensed from foreign companies (%)	9.2	12.4	12.3	4.4	11.4	35.9	31.5	5	7	33.5

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Senegal	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	16.3	35	28.5	12.2	25	64.9	48.4	13.3	14.9	38.5
Employees receiving formal training (%)	52	60.7	51.9	54.4	43.9	55.9	57.3	48.6	53.6	—
Experience of the top manager in the sector (years)	14.8	13.2	11.6	14	18.4	16.7	18	14.4	14.7	16.2

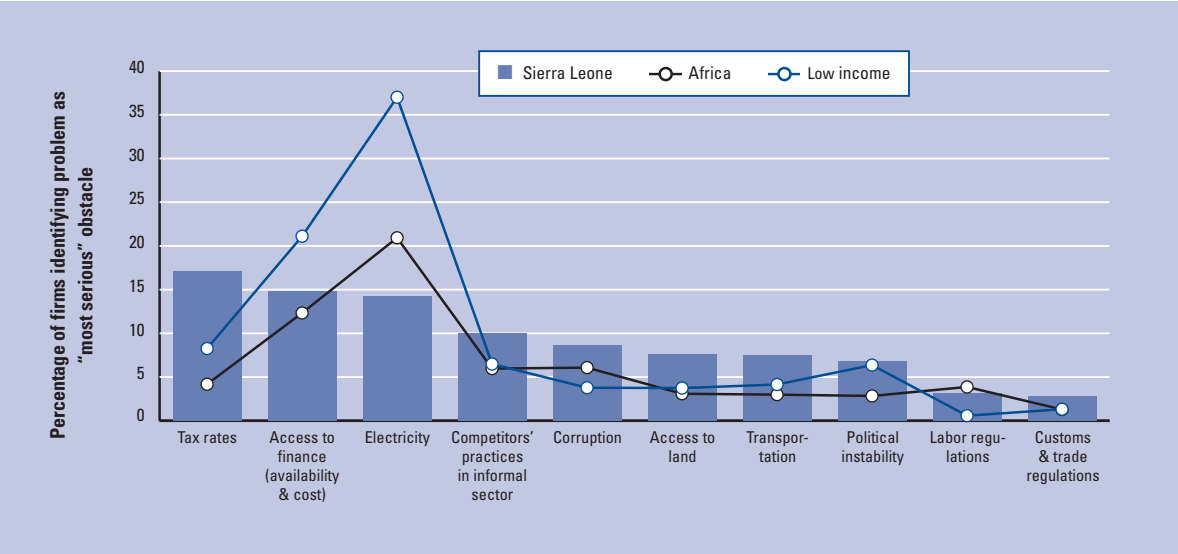
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Senegal	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	8.9	5	6.9	11.7	9.1	5.7	7.7	14	8.1	11.1
Average time to claim imports from customs (days)	8.9	7.2	11.3	8.9	8.2	9.5	10.9	7.5	9	8.4
Exporter firms (%)	13.4	15.5	9.1	7.8	25.7	78.2	100	5.3	11.3	46.9
Firms using material inputs and/or supplies of foreign origin (%)	45.7	41.2	49.9	36	60.7	79.8	75	40.2	42.2	84.2

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Sierra Leone 2009 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Sierra Leone	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	7.4	5.7	4.7	6.5	13	14.2	—	7.3	7.2	9.1
Average number of visits or required meetings with tax officials	2.5	3.1	4.7	2.3	3.8	3.2	—	2.5	2.5	3.3
Time to obtain an operating license (days)	12.6	23.2	19.5	12.4	13.7	—	—	12.5	12.8	6.2
Time to obtain an import license (days)	17.5	26	20.2	15.6	—	—	n/a	17.5	18.9	—

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Sierra Leone	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	18.8	23.2	44.2	19.4	14.1	7.8	—	18.6	19.3	9
Firms expected to give gifts to obtain an electrical connection (%)	7	16.5	25.6	7.6	—	n/a	n/a	7	7	n/a
Firms expected to give gifts in meetings with tax officials (%)	8.6	10.4	19.8	8.5	11.1	0	—	8.4	8.9	3.3
Firms expected to give gifts to secure a government contract (%)	33.9	42.7	50.3	24.9	—	—	—	33.2	33.5	—
Value of gift expected to secure a government contract (% of contract value)	3.8	3.8	5	2.4	—	—	—	3.8	3.8	—

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Sierra Leone	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	29.7	54.7	43	25.8	55.4	62.9	—	29.3	26.1	93.7

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Sierra Leone	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	57.8	69.8	57.5	55.7	65.6	100	—	57.9	55.2	100
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	3.7	3.2	5.8	3.5	2.1	8.5	—	3.6	3.6	5.1
Security costs (% of sales)	3.1	2.3	2.9	2.7	3.2	13.7	—	3	2.9	4.4

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Sierra Leone	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	81.9	46.4	62.3	84.4	67	60.6	—	81.9	82.8	66.8

Sierra Leone

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Sierra Leone	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	7.9	25.9	33.9	6.4	14.5	0	—	7.9	5.3	15.7

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Sierra Leone	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	17.4	26.1	16	14.4	34.4	48.9	—	17.3	14.8	60.4
Internal finance for investment (%)	87	73.6	84.3	88.9	80.4	62.2	—	86.8	88.9	59.9
Bank finance for investment (%)	3.7	19.7	8.5	1.6	10.7	32.5	—	3.8	1.3	37.9
Owners' contribution, new equity shares (%)	5.2	0.2	0.4	5.5	3.1	5.3	—	5.2	5.4	2.1
Informal finance for investment (%)	4	3.1	4.2	3.8	5.8	0	—	4	4.3	0
Suppliers/customers credit financing (%)	3.7	19.7	15.5	3.9	3.3	0	—	3.8	3.7	4
Loans requiring collateral (%)	83.4	73.6	80.8	76.9	100	—	—	83.2	79.4	100
Value of collateral needed for a loan (% of the loan amount)	62.8	109.6	134	70	53.5	—	—	62.8	67.9	46.4
Firms with annual financial statement reviewed by external auditor (%)	20.4	60.2	35.2	14.6	51	92.8	—	20.3	18.2	58.3

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Sierra Leone	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	15.9	6.7	12.4	15.4	20.2	21.9	—	16	15.8	17.5
Value lost due to power outages (% of sales)	6.6	4	7.2	6.3	7.8	14.3	—	6.6	6.1	13.3
Delay in obtaining an electrical connection (days)	14.8	21.8	25.9	15.5	—	n/a	n/a	14.8	14.8	n/a
Delay in obtaining a mainline telephone connection (days)	21.4	25.1	28.3	21.4	n/a	n/a	—	21.5	21.7	—
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	n/a	1.4	1.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Firms using the Web in interaction with clients/suppliers (%)	8.2	28.7	12.8	3.9	38.2	29	—	7.6	5.9	47.3

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Sierra Leone	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	13.8	20.7	9.6	8.1	45.5	75.6	—	13.7	10.4	70.8
Firms using technology licensed from foreign companies (%)	—	12.3	12.2	—	n/a	n/a	n/a	—	—	—

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Sierra Leone	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	18.6	34.9	28	15.8	37.3	31.6	—	18.1	17.7	33.1
Employees receiving formal training (%)	n/a	60.7	51.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Experience of the top manager in the sector (years)	12.6	13.2	11.7	12.4	12.6	21.2	—	12.6	12.5	14.8

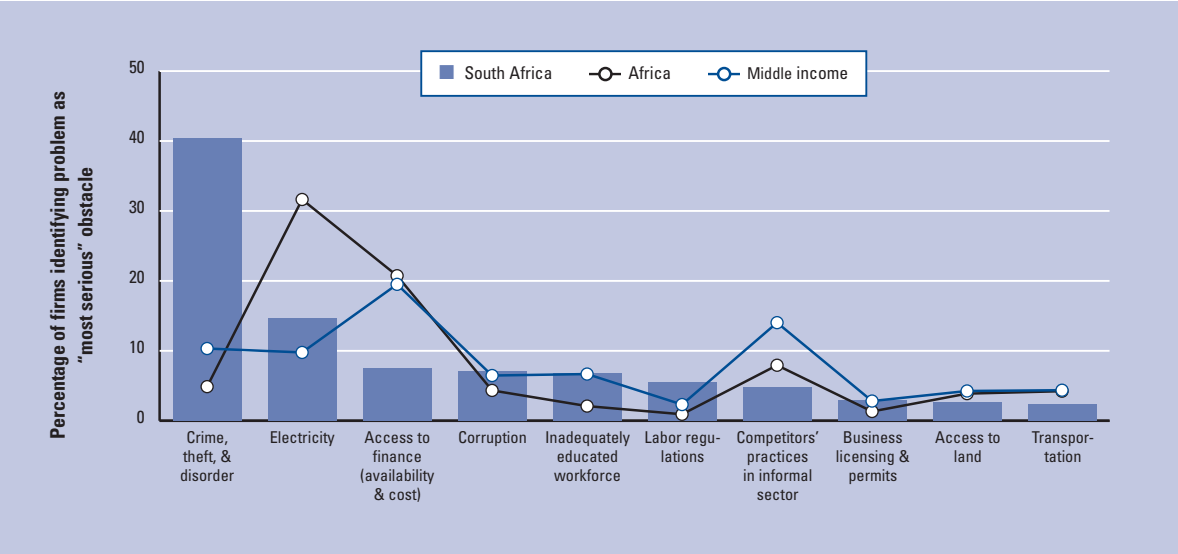
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Sierra Leone	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	—	5	7	—	—	n/a	—	n/a	—	—
Average time to claim imports from customs (days)	n/a	7.2	11.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Exporter firms (%)	3.2	15.5	9.3	2.6	7.4	7.2	—	2.3	3.1	5
Firms using material inputs and/or supplies of foreign origin (%)	—	41.2	49.8	—	n/a	n/a	n/a	—	—	n/a

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

South Africa 2007 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	South Africa	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	5.9	5.2	7.7	5.3	6.8	5.6	6	5.9	6	5.9
Average number of visits or required meetings with tax officials	1.8	4.5	3.6	1.7	1.8	1.9	1.7	1.8	1.8	1.7
Time to obtain an operating license (days)	36.2	19	17.2	29.9	64.8	—	—	36.7	37.1	—
Time to obtain an import license (days)	30.3	21.1	24.4	26.4	34.3	25.3	16.2	34.6	29.8	35.4

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	South Africa	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	15.1	39.3	16.4	13.9	18.5	6.8	13.8	15.2	15.1	15.2
Firms expected to give gifts to obtain an electrical connection (%)	6.7	23.4	5.9	9.8	3.8	0	0	7.9	6.3	10
Firms expected to give gifts in meetings with tax officials (%)	3.1	18.6	10.4	3.9	2.9	1.9	4.6	2.9	2.9	4.4
Firms expected to give gifts to secure a government contract (%)	33.2	45.6	20.8	36.7	37.7	16.2	21.9	36.6	36.7	15.9
Value of gift expected to secure a government contract (% of contract value)	1.7	4.5	1.4	2.7	1.8	0.5	1.9	1.7	2	0.6

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	South Africa	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	59.6	45.3	58.6	62.1	53.7	72.1	58.1	59.7	59.7	58.7

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	South Africa	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	76.4	58	60.3	67.2	82.2	91.3	83	75.7	75	87.9
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	2.4	5.6	4.7	3.1	2.2	1.2	1.3	2.5	2.4	2.6
Security costs (% of sales)	2.1	2.9	3	2.4	2	1.4	1.3	2.1	2.1	2.1

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	South Africa	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	40.3	59.6	46.3	39.1	43.1	34.3	26.4	41.6	37.7	61.5

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	South Africa	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	22.6	32.6	26.4	22.5	23.5	19.7	20.7	22.8	23	19.3

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	South Africa	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	30.1	19	31.5	22.9	35	40.4	41.8	29	31.7	17.4
Internal finance for investment (%)	68.5	81.4	69.7	77.4	64	65.8	65.3	69	66	86.2
Bank finance for investment (%)	25.8	10.5	18.8	17	30.1	28.8	30.1	25.2	27.9	11.1
Owners' contribution, new equity shares (%)	0	0.5	0.5	0	0	0	0	0	0	0
Informal finance for investment (%)	1.7	5.1	8.7	1	2.2	1.8	1.3	1.8	1.9	0.3
Suppliers/customers credit financing (%)	22.3	14.9	13.4	21.1	23.1	23.6	28.8	21.6	22.3	21.8
Loans requiring collateral (%)	71.2	80.5	79.8	69.6	74.1	65.6	68.1	71.7	73.4	38.6
Value of collateral needed for a loan (% of the loan amount)	103.6	124.7	106	105.9	101.4	105.8	101.7	103.8	104.5	79.7
Firms with annual financial statement reviewed by external auditor (%)	71.7	39.4	59.1	59.4	78.8	94.3	89.7	70	73.4	57.9

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	South Africa	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	2.2	11.7	5.6	2.1	2.2	2.3	1.9	2.2	2.2	2
Value lost due to power outages (% of sales)	1.6	6.8	3	1.8	1.5	1.6	1.7	1.6	1.7	0.9
Delay in obtaining an electrical connection (days)	15.8	26.2	30	6.3	29.3	21.7	51.2	9.1	16.3	10.3
Delay in obtaining a mainline telephone connection (days)	23.5	28	26.7	12.3	31	43.3	24	23.4	24.3	18.2
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.4	1.6	1.1	1.7	1.1	1.3	1.3	1.4	1.3	1.9
Firms using the Web in interaction with clients/suppliers (%)	36	15.6	28.2	14.6	47.7	78.3	80.1	31.8	34.8	45.3

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	South Africa	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	26.4	10.5	14.1	10.7	32.8	65.6	62.7	22.9	23.6	48.9
Firms using technology licensed from foreign companies (%)	12.4	12.2	12.1	3.3	12.8	34.2	25.4	10.8	9	37.6

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	South Africa	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	36.8	27.6	26.7	24.2	42.5	65.8	64.4	34.1	35.6	46.9
Employees receiving formal training (%)	62.4	50.9	43	76.3	60.7	54.2	46.5	66.1	63.2	57.7
Experience of the top manager in the sector (years)	13.8	12.1	14.1	10.8	16.1	17.4	20.8	13.2	13.9	13

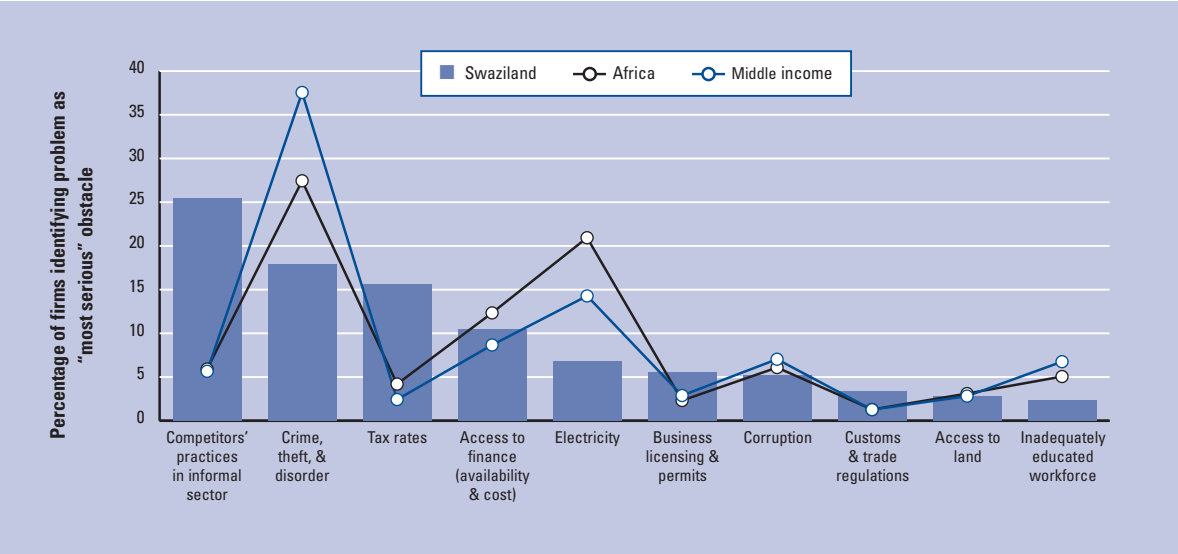
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	South Africa	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	4.6	6.7	5.7	3.3	4.3	5.5	4.9	3.9	4.3	5.6
Average time to claim imports from customs (days)	5.9	10.7	9.2	7.2	6.2	4.8	5.6	6.1	5.9	5.9
Exporter firms (%)	18.4	10.3	15	8.2	22.4	44.7	100	10.6	16.4	35.3
Firms using material inputs and/or supplies of foreign origin (%)	37.8	52.4	66.3	26.9	41.9	52.1	62.8	34.7	35.9	52

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Swaziland 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Swaziland	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	4.4	5.7	6.1	4	6.2	4.2	6.7	4.2	3.5	5.9
Average number of visits or required meetings with tax officials	1.9	3.1	2	1.7	2.2	2.3	2.1	1.8	1.9	1.8
Time to obtain an operating license (days)	24	23	30.3	25.5	8	36.1	13.3	24.9	28.7	16.6
Time to obtain an import license (days)	23.3	25.9	29.3	27	18.1	22.8	23.9	22.9	29.1	18

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Swaziland	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	40.6	23.1	15.1	37.9	43.9	57.7	35.2	41.1	44.1	34.8
Firms expected to give gifts to obtain an electrical connection (%)	8.4	16.5	6.6	0	23.5	—	12.4	7.4	0	24.9
Firms expected to give gifts in meetings with tax officials (%)	3.3	10.5	3.8	2.3	6	6.5	7.8	2.8	4.7	1.3
Firms expected to give gifts to secure a government contract (%)	31.9	42.8	28.9	28.9	33.8	54.3	26.2	32.4	36	24.7
Value of gift expected to secure a government contract (% of contract value)	1.1	3.9	1.6	1.2	0.8	0.8	0.9	1.1	1.3	0.8

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Swaziland	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	40.3	54.6	59.6	44	33.6	23.2	35.4	40.8	39.9	41

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Swaziland	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	66.7	69.8	75	58.7	83.5	100	93.6	64	61.6	75.3
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	3.4	3.2	2.5	4.5	1.6	1.1	2	3.6	4	2.6
Security costs (% of sales)	2.1	2.3	2.1	2.1	2.6	0.9	0.8	2.3	2.2	1.9

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Swaziland	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	74.6	46.4	40.7	75.9	64.7	83.5	82.1	73.8	72.2	78.7

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Swaziland	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	28.6	25.8	22.9	31.2	21.7	19.9	32.1	28.2	25.2	34.4

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Swaziland	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	21.9	26.1	30.3	21.3	21.3	28.8	32.7	20.8	23.4	19.4
Internal finance for investment (%)	75.8	73.7	68.6	77.3	67.2	83.3	81.7	74.9	77.1	74
Bank finance for investment (%)	12	19.6	25	10.6	18.7	8	11.5	12.1	12.5	11.2
Owners' contribution, new equity shares (%)	0	0.2	0.1	0	0	0	0	0	0	0
Informal finance for investment (%)	6.6	3.1	2.6	7.5	3.3	7	2.2	7.3	3.8	10.7
Suppliers/customers credit financing (%)	22	19.6	21.4	22.1	22.6	20.2	26.4	21.6	21.5	23
Loans requiring collateral (%)	73	73.7	72.1	72	60.8	100	92.6	70	73.1	72.9
Value of collateral needed for a loan (% of the loan amount)	104.6	109.4	103.8	70.8	206.6	184.8	229.5	81.9	83.3	147.9
Firms with annual financial statement reviewed by external auditor (%)	71.8	60	70.5	63.7	92.1	97.8	96.6	69.3	63.1	86.5

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Swaziland	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	2.5	6.8	2.5	2.3	3.3	3	3	2.5	2.4	2.7
Value lost due to power outages (% of sales)	2.5	4.1	1.7	2.4	3.5	1.1	2.4	2.5	2.1	2.9
Delay in obtaining an electrical connection (days)	16.9	21.7	17.4	17.4	16.8	—	5.4	20	21.8	7.8
Delay in obtaining a mainline telephone connection (days)	36.9	25.1	23.7	40.8	27.2	22.6	17.3	39.7	41.6	23.6
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.5	1.4	1.4	0.4	0.6	2.9	3.1	0.7	1.3	1.8
Firms using the Web in interaction with clients/suppliers (%)	20.8	28.6	35.3	13.9	38.7	42.2	35.6	19.3	16.7	27.9

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Swaziland	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	22.1	20.7	25.2	18.1	25.8	49	44.7	19.8	14.9	34.3
Firms using technology licensed from foreign companies (%)	12.9	12.3	12.4	7.7	9.9	18.6	18.7	9.8	10.5	16.7

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Swaziland	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	50.9	34.8	36.3	31.7	37.5	74.2	76.7	37.4	46.8	57.8
Employees receiving formal training (%)	53.5	60.7	62	64.8	34.4	56	65	44.5	54.8	51.4
Experience of the top manager in the sector (years)	7.9	13.2	13.9	7.6	9.3	8.2	10	7.7	7.3	9.1

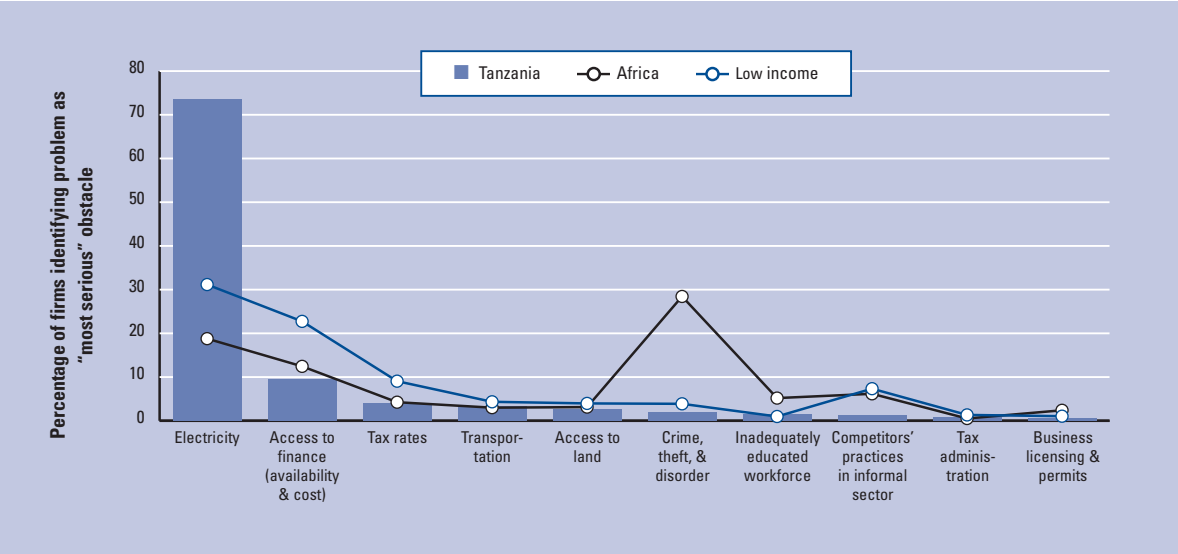
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Swaziland	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	4	5	4.6	5.4	7	1.9	4.1	—	6.1	2.2
Average time to claim imports from customs (days)	2.2	7.2	6.2	—	2.6	2.1	2.3	1.9	2.2	2.1
Exporter firms (%)	11	15.5	18.1	5.6	10.5	58.6	100	2.1	7.2	17.3
Firms using material inputs and/or supplies of foreign origin (%)	62.9	41.2	39.1	33.8	62.3	86.2	91.3	47.9	54.6	76.4

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Tanzania 2006 Investment Climate Profile

Top 10 most serious constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Tanzania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	4	5.8	4.9	3.6	4.1	7.8	6.6	3.9	3.9	4.6
Average number of visits or required meetings with tax officials	3.3	3.1	4.8	3.3	3.3	3.6	4.3	3.3	3.3	2.9
Time to obtain an operating license (days)	15.9	23.8	19.9	14.7	17.1	20.5	15	15.9	15.2	20.5
Time to obtain an import license (days)	20.2	26.3	20.2	15.2	16	26.3	—	20.7	22.9	15.3

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Tanzania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	49.5	22.1	42.8	51.4	50.3	25.4	57.2	49.2	49.3	50.8
Firms expected to give gifts to obtain an electrical connection (%)	18.6	16.4	26.3	8.4	41.2	6.5	—	18.9	22.3	0
Firms expected to give gifts in meetings with tax officials (%)	14.7	10.1	20.5	14.4	15.8	13.5	22.4	14.5	15.1	11.7
Firms expected to give gifts to secure a government contract (%)	42.7	42.7	52.4	43.1	43.8	35	59.7	42.2	42	48.3
Value of gift expected to secure a government contract (% of contract value)	2.9	4	5.6	3	3	2.2	5	2.9	3	2.6

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Tanzania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	46.6	54.9	42.2	47.7	37	68.2	53.4	46.5	46	51.7

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Tanzania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	71.6	69.7	55.4	65.1	85.7	95.5	94	71	69.2	91.8
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	3.9	3.1	6.1	5.5	1.6	1.1	3.9	3.9	4	3.6
Security costs (% of sales)	3.1	2.3	2.9	3.4	3	0.7	1.7	3.1	3.4	1.3

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Tanzania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	71	45.5	61.2	74.4	65.2	52.8	41.8	71.9	71.6	66.2

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Tanzania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	30.9	25.6	34.4	32.6	33	5.7	35	30.8	31.2	28.9

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Tanzania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	16.3	26.4	16	11.3	12.8	82.9	35.9	15.7	14.1	33.6
Internal finance for investment (%)	84.6	73.1	84.3	88.7	81.9	66.4	87.7	84.5	85.3	80
Bank finance for investment (%)	7.8	20.2	8.5	4.4	9	26	11.7	7.6	7.6	9
Owners' contribution, new equity shares (%)	0.2	0.2	0.5	0	0	2	0	0.2	0	1.4
Informal finance for investment (%)	6.2	2.9	3.8	6	8.8	0.2	0.6	6.5	5.7	9.6
Suppliers/customers credit financing (%)	13.8	19.8	15.5	11.5	18.4	23.3	20.3	13.6	13	20.8
Loans requiring collateral (%)	92.6	73.2	79.1	86.9	100	97	100	92.1	90.7	99.1
Value of collateral needed for a loan (% of the loan amount)	124.1	109	134.2	120.1	130.1	126.8	104.2	125.6	132.2	100.3
Firms with annual financial statement reviewed by external auditor (%)	51.4	60.3	32.4	38.4	79.4	99.2	97.8	50.1	46.7	90.2

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Tanzania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	12	6.5	12.6	11.4	13.5	12.8	10.6	12	12.4	8.5
Value lost due to power outages (% of sales)	9.6	3.7	6.8	9.5	10.2	8.9	9.9	9.6	9.7	8.9
Delay in obtaining an electrical connection (days)	44.3	20.4	23.6	37.2	19.6	160.8	—	44.8	32.5	102
Delay in obtaining a mainline telephone connection (days)	23.2	25.2	29.1	21.1	28	17.4	—	23.3	24.2	19
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.8	1.4	1.6	0.9	2.9	2.7	2.2	1.7	1.7	2.2
Firms using the Web in interaction with clients/suppliers (%)	16.3	29.1	12.2	5.6	35	70.6	28.8	15.9	13.9	36.1

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Tanzania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	14.7	20.9	8.9	8.5	22.2	57.1	21.4	14.5	12.4	33.5
Firms using technology licensed from foreign companies (%)	14.7	12.3	12	9.8	14.1	35.6	12.2	15	11	37.9

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Tanzania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	36.5	34.8	27.1	28.8	37.1	65.1	53.2	35	31.6	66.7
Employees receiving formal training (%)	55.6	60.8	51.3	65.3	47.5	50.4	56.3	55.5	57.4	50.4
Experience of the top manager in the sector (years)	10.5	13.3	11.8	9.3	12.5	16.7	13.6	10.4	10	14.7

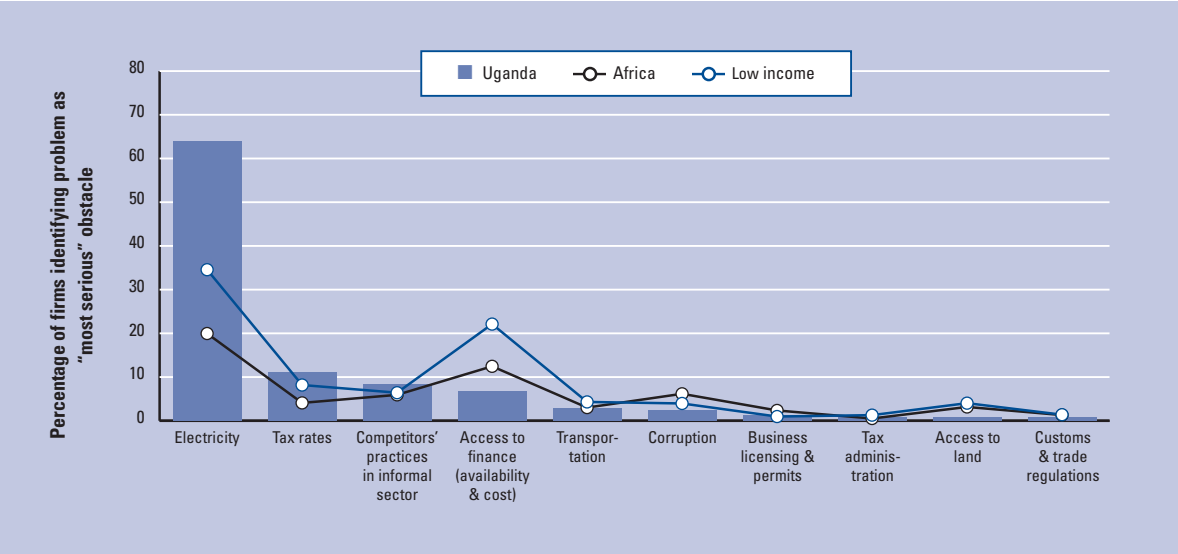
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Tanzania	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	5.7	5	7.2	5.2	5.1	6.8	5.2	7.4	6.1	4.8
Average time to claim imports from customs (days)	14.3	7	10.7	20.2	13.7	13.4	10.1	15.3	15.2	12.3
Exporter firms (%)	4.8	15.9	9.9	2.8	6.4	21	100	2.1	4.1	10.6
Firms using material inputs and/or supplies of foreign origin (%)	48.3	41.1	50	33	59.8	81.1	85.9	45.1	44.9	69.2

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Uganda 2006 Investment Climate Profile

Top 10 constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Uganda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	5.2	5.7	4.7	5.3	5.2	4.5	6.4	5.1	5	6
Average number of visits or required meetings with tax officials	2.9	3.1	4.8	2.7	3	3.4	3	2.9	3	2.4
Time to obtain an operating license (days)	9.3	24.4	20.9	10.6	6.5	8.6	9.7	9.3	9.4	8.6
Time to obtain an import license (days)	16.1	26.3	20.6	14.7	14.7	22.6	13.8	16.9	14.6	19.3

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Uganda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	51.7	22.6	43.2	50.3	56.5	44.3	44.5	52.1	53	45.6
Firms expected to give gifts to obtain an electrical connection (%)	19.2	16.5	25.7	15	29.5	0	30.8	18.3	16.1	26.7
Firms expected to give gifts in meetings with tax officials (%)	14.5	10.3	20.1	13.9	15	18.3	11.3	14.7	13.9	17.3
Firms expected to give gifts to secure a government contract (%)	46.4	42.4	50.7	43	55.1	43.8	34	47.1	46.8	44.6
Value of gift expected to secure a government contract (% of contract value)	5.6	3.7	5	4.8	7.4	6.2	2	5.8	5.4	6.5

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Uganda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, and uncorrupted (%)	43.5	54.8	42.7	43.5	43.5	43.7	55.1	42.9	43.3	44.8

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Uganda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	63.4	69.9	57.1	53.8	80.4	90.4	92.8	61.8	58	89.4
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	4.1	3.2	5.9	4.5	4.3	0.7	1	4.4	4.6	1.1
Security costs (% of sales)	2.5	2.3	2.9	2.9	1.9	1.6	1.4	2.5	2.5	2.3

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Uganda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	74.5	45.9	61.6	79	68.6	50.3	73.9	74.5	76.8	63.4

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Uganda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	34.7	25.6	33.8	33.3	37.2	38.7	29.5	35	37.2	22.7

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Uganda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	17.2	26.2	16	15.4	14.5	49.2	29.7	16.6	17.1	17.8
Internal finance for investment (%)	78.3	73.6	84.7	81.9	78	55.6	58.3	79.5	82.6	60.4
Bank finance for investment (%)	12.7	19.7	8.1	9.8	12	34.9	23.9	12.1	8.6	30
Owners' contribution, new equity shares (%)	0.4	0.2	0.5	0.7	0	0	0	0.4	0.5	0
Informal finance for investment (%)	6.1	3	4.1	6.3	6.7	2.6	4.2	6.2	6.4	5.1
Suppliers/customers credit financing (%)	17	19.7	15.2	13.7	22	29.5	24.6	16.6	15.7	23
Loans requiring collateral (%)	88.4	73.5	80.2	85.6	97.7	85.7	82.2	89	89.6	82.9
Value of collateral needed for a loan (% of the loan amount)	173	108.4	129.1	121.5	173	335.3	214.3	169	170.6	185
Firms with annual financial statement reviewed by external auditor (%)	50.7	60.2	33.7	37.4	71.5	100	81.8	49	44.1	82.7

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Uganda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	11	6.6	12.6	10.9	11.3	11.3	9.6	11.1	11.2	9.9
Value lost due to power outages (% of sales)	10.2	3.8	6.9	9	13.5	8.8	12.9	10.1	10.1	10.7
Delay in obtaining an electrical connection (days)	33	21.5	25.5	30.9	36.9	28.7	32.1	33.1	34.8	28.3
Delay in obtaining a mainline telephone connection (days)	12.8	25.3	29	11.8	12.8	15.3	13.4	12.7	13.1	12.2
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	1.4	1.4	1.7	1.3	1.6	1.4	2.3	1.3	1.1	2.7
Firms using the Web in interaction with clients/suppliers (%)	10.7	29	12.9	7.2	11.7	43.9	35.9	9.4	7	28.6

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Uganda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	15.5	20.8	9.2	11.1	20	42.4	41.6	14.2	8.9	47.6
Firms using technology licensed from foreign companies (%)	11.1	12.4	12.3	7.3	15.7	17.1	18.1	10.2	7.2	26.8

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Uganda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	35	34.8	27.4	28.1	38.7	62.2	57.8	32	30.8	52
Employees receiving formal training (%)	57.3	60.8	51.5	53.8	63.1	49.2	61.2	56.7	56.1	60.6
Experience of the top manager in the sector (years)	10	13.3	11.8	8.6	12.3	14.4	14.2	9.8	9.6	11.8

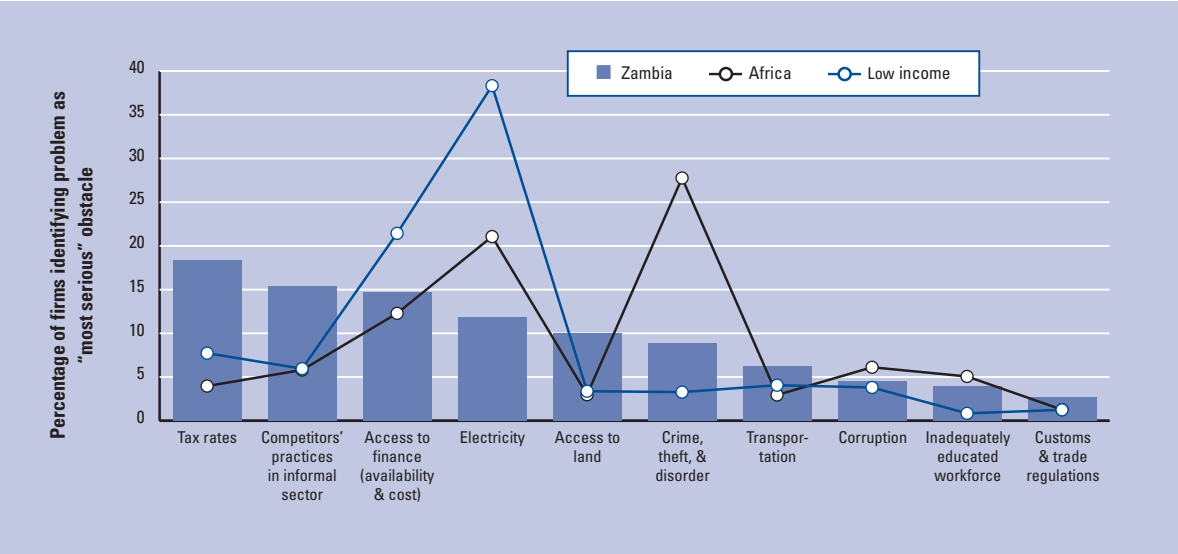
	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Uganda	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	4.7	5	7.2	10	3.5	2.7	5	3.3	6.2	2.8
Average time to claim imports from customs (days)	7.4	7.2	11.5	8.8	7	7.1	5.1	8.6	8.3	6.5
Exporter firms (%)	10.1	15.6	9.1	7.5	10.6	36.4	100	5.5	8.3	18.9
Firms using material inputs and/or supplies of foreign origin (%)	41.1	41.2	50.3	21	64.3	78	67.6	37.7	33.2	73.8

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

Zambia 2007 Investment Climate Profile

Top 10 constraints perceived by entrepreneurs



	MACRO DIMENSION			MICRO DIMENSION						
BUREAUCRACY	Zambia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Senior management time spent in dealing with requirements of government regulation (%)	4.5	5.7	4.8	3.7	5.3	6.6	5.5	4.5	4.1	5.8
Average number of visits or required meetings with tax officials	2.9	3.1	4.7	2.7	2.9	3.7	3.4	2.8	3.1	2.3
Time to obtain an operating license (days)	47.3	21.6	16.8	55.8	46.3	22.8	28.2	49.7	46.4	50.2
Time to obtain an import license (days)	18.4	26.2	20.3	24	21.4	6.2	13.4	19.4	19.9	16.7

	MACRO DIMENSION			MICRO DIMENSION						
CORRUPTION	Zambia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expected to make informal payments to public officials "to get things done" (%)	14.8	23.3	45.9	13.2	20.1	8.5	14.3	14.8	16.3	10.7
Firms expected to give gifts to obtain an electrical connection (%)	6.7	16.6	25.9	1.9	17.1	0	35.3	0.8	8.4	0
Firms expected to give gifts in meetings with tax officials (%)	5.4	10.6	20.6	7.4	3.4	2.6	2.2	5.7	6.4	2.9
Firms expected to give gifts to secure a government contract (%)	27.5	42.9	50.7	26.1	31.8	21.1	39.9	25.3	34.3	11.5
Value of gift expected to secure a government contract (% of contract value)	2.1	3.8	5.1	1.9	2.5	2	2.6	2	2.4	1.5

	MACRO DIMENSION			MICRO DIMENSION						
COURTS	Zambia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms believing the court system is fair, impartial, impartial, and uncorrupted (%)	54.7	54.6	42	50.2	60.1	61.6	51.8	55	52.7	60.1

	MACRO DIMENSION			MICRO DIMENSION						
CRIME	Zambia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms paying for security (%)	70.4	69.8	56.7	59.2	83.8	87.1	85.9	68.9	66.3	81.7
Losses due to theft, robbery, vandalism, and arson against the firm (% of sales)	3.3	3.2	6	4.5	2.2	2.1	2	3.4	4	1.6
Security costs (% of sales)	2	2.3	3	2.1	2	1.8	1.7	2.1	2	2.1

	MACRO DIMENSION			MICRO DIMENSION						
INFORMALITY	Zambia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms expressing that a typical firm reports less than 100% of sales for tax purposes (%)	n/a	46.5	62.7	n/a	n/a	n/a	n/a	n/a	n/a	n/a

2007 Investment Climate Profile Zambia

	MACRO DIMENSION			MICRO DIMENSION						
GENDER	Zambia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with female participation in ownership (%)	37.4	25.6	33.6	36.6	39.7	35.1	40.6	37.1	35.5	42.5

	MACRO DIMENSION			MICRO DIMENSION						
FINANCE	Zambia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with lines of credit or loans from financial institutions (%)	15.7	26.2	16.1	6.4	25.5	33.5	30.8	14.3	13.5	22
Internal finance for investment (%)	88.3	73.5	84.1	94.4	81.5	84.5	87.9	88.4	89	87
Bank finance for investment (%)	5.3	19.8	8.5	1.7	9.2	7.7	11.2	4.3	5.2	5.3
Owners' contribution, new equity shares (%)	0.8	0.2	0.5	0.4	1.7	0	0.6	0.8	0.5	1.3
Informal finance for investment (%)	2.1	3.1	4.3	2.5	0.8	3.4	0	2.5	2	2.3
Suppliers/customers credit financing (%)	26	19.5	14.6	25	27.4	27.4	29.5	25.7	24.9	29
Loans requiring collateral (%)	93	73.4	80.1	77.7	97.5	97.6	100	91.6	92.1	94.5
Value of collateral needed for a loan (% of the loan amount)	145.6	108.9	131.6	158.5	129.3	172.7	177.6	140	142.4	151.4
Firms with annual financial statement reviewed by external auditor (%)	72.7	59.8	32.4	63.3	80.2	96.9	94	70.7	69.7	81

	MACRO DIMENSION			MICRO DIMENSION						
INFRASTRUCTURE	Zambia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Number of power outages in a typical month	4.2	6.8	13	3.6	4.8	4.8	6.6	3.9	4.7	2.8
Value lost due to power outages (% of sales)	3.6	4.1	7.4	3.8	3.9	2.2	4.2	3.6	3.9	2.8
Delay in obtaining an electrical connection (days)	93.2	20.9	24.2	149.5	59.7	52.1	26.4	102.9	99.5	63.7
Delay in obtaining a mainline telephone connection (days)	17.5	25.2	28.9	15.8	21.8	14.5	15.2	17.8	17.9	15.4
Products shipped to supply domestic markets lost due to breakage or spoilage (%)	0.8	1.4	1.7	0.9	0.7	1	0.4	0.9	1	0.3
Firms using the Web in interaction with clients/suppliers (%)	19.5	28.8	12.3	12.4	17.1	58.6	45.7	17	14.7	32.5

	MACRO DIMENSION			MICRO DIMENSION						
INNOVATION	Zambia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms with internationally recognized quality certification (%)	17.2	20.7	9.2	10.7	24.1	26.6	32.5	15.6	11.6	31.2
Firms using technology licensed from foreign companies (%)	24.2	12.2	11.4	29	19.9	26	19	25.3	25.1	22

	MACRO DIMENSION			MICRO DIMENSION						
WORKFORCE	Zambia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Firms offering formal training (%)	25.4	35	28.1	17.9	31	45.5	42.6	23.7	23.5	30.7
Employees receiving formal training (%)	50.3	60.8	52.1	47.1	46.2	57.8	42.3	52.9	47.2	54.4
Experience of the top manager in the sector (years)	12.7	13.2	11.6	10.6	15.4	15.2	15.4	12.4	12.3	13.7

	MACRO DIMENSION			MICRO DIMENSION						
TRADE	Zambia	Region	Income	Small	Medium	Large	Exporter	Nonexporter	Domestic	Foreign
Average time to clear direct exports through customs (days)	3.1	5	7.6	2.4	2.5	3.7	3.5	1.9	3.5	2.5
Average time to claim imports from customs (days)	6.6	7.2	12.3	13.6	6	3.5	3.9	7.5	8.2	4
Exporter firms (%)	14.7	15.5	8.8	4.1	16.7	58.1	100	6.5	11.5	23.4
Firms using material inputs and/or supplies of foreign origin (%)	84.6	40.1	44.9	82.7	84.9	90.4	89.7	84	82.6	89.2

Data source: Enterprise Surveys
More data available at http://www.enterprisesurveys.org/

Note: Statistics with fewer than five firms are displayed with a "—" to maintain confidentiality and should be distinguished from "n/a," which represents missing values.

About the Authors

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Thorsten Beck is Professor of Economics and Chairman of the European Banking Center at Tilburg University. Before joining the university in 2008, he worked at the Development Research Group of the World Bank. His research and policy work has focused on two main questions: What is the effect of financial sector development on economic growth and poverty alleviation? What are the determinants of a sound and effective financial sector? Recently, his research has focused on access to financial services by small and medium-sized enterprises and households. Professor Beck is co-author of *Making Finance Work for Africa* and *Finance for All? Policies and Pitfalls in Expanding Access*. His country experience in both research and policy work includes Bangladesh, Bolivia, Brazil, China, Colombia, Mexico, Peru, Russia, and several sub-Saharan African countries. He is also a Research Fellow in the Centre for Economic Policy Research (CEPR) in London and a Fellow in the Center for Financial Studies in Frankfurt. He studied at Tübingen University, Universidad de Costa Rica, the University of Kansas, and the University of Virginia.

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The publication of this year's *Africa Competitiveness Report* comes against the backdrop of the most significant global economic crisis in generations. In Africa, where impressive growth rates and increasing levels of FDI supported an economic resurgence over the past decade, the recent global economic turmoil has raised questions about the sustainability of its growth performance over the medium run. In this context, the goal of the *Report* is to highlight the areas most urgently requiring policy action and investment to ensure that Africa can best ride out this crisis and continue to grow sustainably into the future.

This is the second report on the region's business environment to leverage the knowledge and expertise of the African Development Bank, the World Bank, and the World Economic Forum, presenting a unified vision of the policy challenges that countries on the continent should address as a foundation for sustainable growth and prosperity.

Much has been done in recent years to improve the business and economic environment in Africa. Continued policy and institutional reform remain central to ensuring that African countries continue on a higher growth trajectory. In this context, the *Report* examines many aspects of Africa's business environment, including assessments of the competitiveness and costs of doing business on the continent, timely analyses of the depth and sophistication of the region's financial markets, the effective measures that the relatively smaller economies on the continent have introduced to promote their competitiveness, and the extent to which African countries have put into place factors facilitating the free flow of trade over their borders.

Detailed competitiveness and investment climate profiles, which provide a comprehensive summary of the drivers of the competitiveness environment in each of the countries included in the *Report,* make up the final section. *The Africa Competitiveness Report 2009* is an invaluable tool for policymakers, business strategists, and other key stakeholders, as well as essential reading for all those with an interest in the region.

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