

# European Vacancy Monitor

Issue no. 2/2011 | March 2011

The European Vacancy Monitor is published quarterly by DG Employment, Social Affairs & Inclusion of the European Commission.

This is a new publication within the Europe 2020 flagship initiative “An Agenda for New Skills and Jobs”. It will be further refined also taking into account stakeholders’ feedback. Neither the European Commission nor any person acting on behalf of the Commission may be held responsible for the use that may be made of the information contained in this publication. Comments are gratefully received and should be sent to:

DG EMPL C.4  
European Commission  
B-1049 Bruxelles/Brussel  
Email: empl-c4-unit@ec.europa.eu

## INSIDE

I.	INTRODUCTION	2
II.	SHORT TERM TRENDS IN JOB VACANCIES	2
III.	OCCUPATIONS	7
IV.	BOTTLENECKS	12
V.	EDUCATION AND SKILLS	15
VI.	LISTINGS OF MOST DEMANDED OCCUPATIONS PER COUNTRY	16
ANNEX A1	ABBREVIATIONS	23
ANNEX A2	DEFINITIONS AND CONCEPTS	24

### Further Information

- European Job Mobility Bulletin
- Quarterly Labour Market Review

## HIGHLIGHTS

### *European Vacancy Monitor: a new source of information*

The European Vacancy Monitor (EVM) is an up-to-date review of developments in the job vacancy market in Europe. From now on, information from Public Employment Services (PES) is included in the EVM.

>> [Read more on page 2](#)

### *The demand for labour increased significantly in 2010*

Growth in the total number of job vacancies (+26%), job-finders (+8%), PES job vacancies (+6%), job vacancies for temporary agency workers (+22%) and on line job vacancies (+25%) indicates an increase in labour demand in Europe, though not in all regions. Especially Lithuania, Germany and Sweden show a strong growth in labour demand. This trend is less pronounced in Latvia, Cyprus, Romania, Bulgaria, Slovakia, Netherlands, Slovenia, Czech Republic and Greece.

>> [Read more on page 3](#)

### *Growth in labour demand in trade (+42%), manufacturing (+36%) and non-financial business services (+32%).*

The growth in these exports fuelled sectors has led to a strong increase in demand for plant and machine operators and assemblers. For this occupational group the number of job vacancies registered at PES is 73% higher in 2010Q3 than in 2009Q3. And the number of online job vacancies for the same group has risen by 67% in this period. Growth in demand for managers and senior officials and craft and related trade workers is also strong.

>> [Read more on page 7 for sectors and occupations, for PES page 10](#)

>> [Charts job vacancies and job-finders by economic sector on page 8](#)

### *Nine unemployed people per job vacancy in Europe, but indications of tightening labour markets in some countries*

Based on PES-data, there are indications for tightening in the labour market for occupations with growing demand: craft and related trade workers, plant and machine operators and assemblers. Demand for technical occupations in comparison to supply remains relatively high.

>> [Read more on page 12](#)

>> [Charts number of unemployed divided by the number of vacancies on page 13](#)

### *Most people found a job as shop, stall or market salesperson or demonstrator*

>> [Top 25 job-finders per occupation on page 12](#)

### *Manufacturing labourers fastest-growing group of job-finders*

>> [Top 25 growth of job-finders per country on page 16](#)

### *Most new PES job vacancies for shop salespersons and demonstrators*

>> [Top 5 new PES job vacancies on page 21](#)

### *Finance and sales associate professionals most in demand on the EURES-portal*

>> [Top 5 EURES job vacancies on page 22](#)

## I. INTRODUCTION

In response to shifts and developments in the labour markets, the European Commission launched the “New Skills for New Jobs Initiative” aimed at supporting Member States’ efforts in tracking, analysing and predicting the skills needed in tomorrow’s labour markets. As part of the initiative, the European Commission funded a monitoring system at the same time to work as an “early warning tool” under the “Monitoring Labour Market Developments in Europe” project.

The results of the project will be published on a quarterly basis in two different publications: the European Job Mobility Bulletin (EJMB) and here in this publication - the European Vacancy Monitor (EVM).

The European Job Mobility Bulletin (EJMB) specifically targets mobile job seekers and EURES (EUROpean Employment Services) advisers. The bulletin is an analysis of the data on the EURES Job Mobility portal.

The EVM is more comprehensive and targeted at a broader audience. It seeks to contribute to policy development and the functioning of labour markets. It provides an up-to-date, dynamic picture of developments in the demand for labour, using a wide range of sources to produce the relevant data. Data on job vacancies, job-finders and hiring will also provide insight into areas with recruitment difficulties and skills shortages. This is our second issue.

Key sources of information for the EVM include the Public Employment Services (PES), National Statistical organisations (NSOs), Temporary Work Agencies (TWAs), online recruitment services (ORS) and research institutions. Information is also collected by international bodies including Eurostat (the Statistical Office of the European Communities), and Eurociett, the European Confederation of Private Employment Agencies. The monitor has information from all 27 EU countries.

### *EVM information is “work in progress”*

Data collection for the EVM started in the second quarter of 2010 and it is ongoing. Contacts with a network of relevant institutions have been established and will continue to be extended. Future research will be based on a systematic Europe-wide inventory of labour market information systems for all EU countries. Given the diversity of each country’s labour market information systems, the quality of the results will also depend on the quality of data available at national level.

This issue of the EVM uses labour market information gathered from data for the first three quarters of 2010, together with data from Randstad and Monsterboard for the whole of 2010.

The leading data sources that have been used for this second issue are the Labour Force Survey (LFS) and the Job Vacancy Statistics (JVS) produced by Eurostat. The LFS provides very

detailed standardised information for all EU-27 member states, on a quarterly basis. However, the data for the third quarter of 2010 is limited to 16 member states due to the absence of information from the remaining countries at the time of publication. JVS data are collected by member states and assembled by Eurostat on a quarterly basis. Data from the third quarter is available for 18 countries.

This issue includes information from Public Employment Services (PES) across Europe. By establishing contacts and visiting the relevant institutions across Europe, PES data from 20 member states has so far been collected. Not all data is complete for each member state. For example, some PES have provided stock data as well as inflow and outflow data, whereas other PES have provided only stock data. A stock number is a measure at a certain moment in time, while a flow number is measured over a period of time. In addition, PES-data have limitations for comparability at European level, given the use of different classification systems for occupations. For example, not all PES use the ISCO classification system for occupations, and some do not use the ISCO system for equivalent levels. Where possible, the data using national occupational codes are converted into data with ISCO codes.

Public Employment Services cover only a specific part of the vacancy market. Not all vacancies are registered at PES. First calculations show that approximately one third of new job vacancies on the labour market are registered by PES (market range). However, in future issue of this publication the figures for job vacancies registered by PES compared to JVS and LFS will be analysed more thoroughly.

Additional information for the EVM has also come from the private sector, including data from Eurociett, Randstad (a Temporary Work Agency) and Monsterboard, the online recruitment company.

## II. SHORT TERM TRENDS IN JOB VACANCIES

### *Recovery in economic growth was accompanied by an increase in the number of job vacancies and job-finders.*

EU27 GDP increased by 4.7% between the third quarter of 2009 and the third quarter of 2010, recovering from a strong fall in GDP (-6.8%) after the third quarter of 2008 (Eurostat). Although in 2010Q3, GDP has still not fully recovered to its 2008Q3 level, the economic boost in Europe has led to increased labour demand and a stabilisation in employment levels after nearly two years of contraction.

# European Vacancy Monitor

Issue no. 2/2011 | March 2011

*Positive development in demand for labour in Lithuania, Germany and Sweden*

All indicators point in the same direction: in 2010 there was a positive development on the demand side of the labour market in Europe. Job vacancies (+26%), job-finders (+8%), PES job vacancies (+6%), temporary agency work (+22%) and on line job vacancies (+25%) all went up. Some countries showed a significant positive picture. Lithuania, Germany and Sweden had a consistently high ranking for all information sources. Different data pointed in the same direction. In these three countries, the growth in the number of job vacancies (JVS), the job-finder rate (LFS), the inflow of PES job vacancies and the number of online job vacancies (MEI) were relatively high. In Cyprus, Romania, Bulgaria, Slovakia, the Netherlands, Slovenia, Czech Republic and Greece, the demand for labour remained weak, unstable or showed a mixed picture for the different information sources when compared to the overall picture in Europe.

## *Increase in job vacancies*

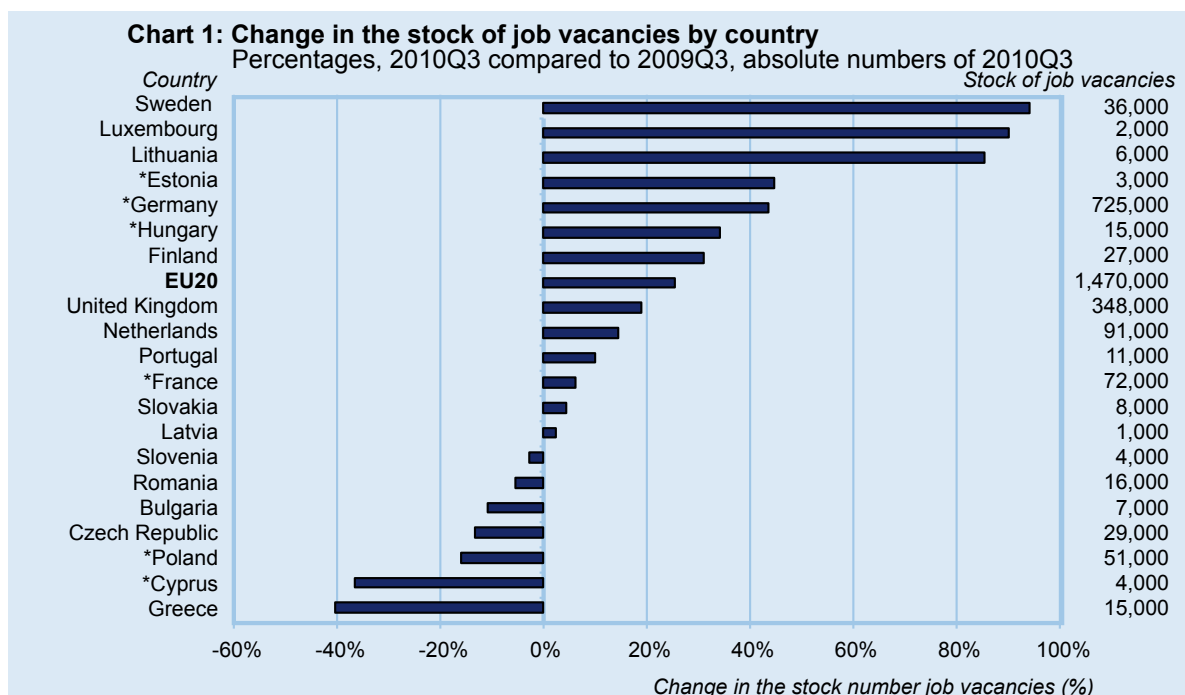
In the third quarter of 2010, the stock of job vacancies was 26 percent higher than the third quarter of 2009 (chart 1). This number is based on the Eurostat Job Vacancy Statistics (JVS) using data from 20 countries.

*While some countries showed a pronounced recovery, others were still affected by crisis*

An above average recovery is mainly seen in Sweden, Luxembourg, Lithuania, Estonia, Germany, Hungary and Finland. Several countries are still very much affected by economic downturn and encountered a decline in the stock of job vacancies: Greece, Cyprus, Poland, Czech Republic and Bulgaria. Other countries witnessed below average growth in the stock of job vacancies. This can be caused either by an already relatively high level of stock job vacancies in 2009Q3 when compared to other countries (as in France, Portugal and the UK) or a slow-paced recovery of stock job vacancy levels (as in the Netherlands, Slovakia and Latvia).

*Though more job-seekers found work, this was not the pattern in every country*

In the third quarter of 2010, 11 million people found a job. This is 8% higher than a year earlier (chart 2). In most countries, there is a positive development. Generally, countries who have witnessed a strong growth in the stock of job vacancies, also witnessed a strong increase in the number of job-finders between the third quarter of 2009 and the third quarter of 2010 (for example in Lithuania, Luxembourg,



Source: EU JVS data - own calculation (20 countries)

\*estimate

No data available for missing countries. Agriculture, mining, electricity, waterworks and government excluded, no data available for these sectors. The stock of job vacancies is the number of job vacancies measured at a certain moment in time. The numbers in this chart provide a complete picture: the numbers cover all job vacancies of all recruitment channels.

# European Vacancy Monitor

Issue no. 2/2011 | March 2011

and Sweden). In France, Portugal and the UK, the moderate growth in the stock of job vacancies is accompanied by a moderate growth in job-finders. A decline is seen in Greece, Bulgaria, Slovenia, the Netherlands and Romania.

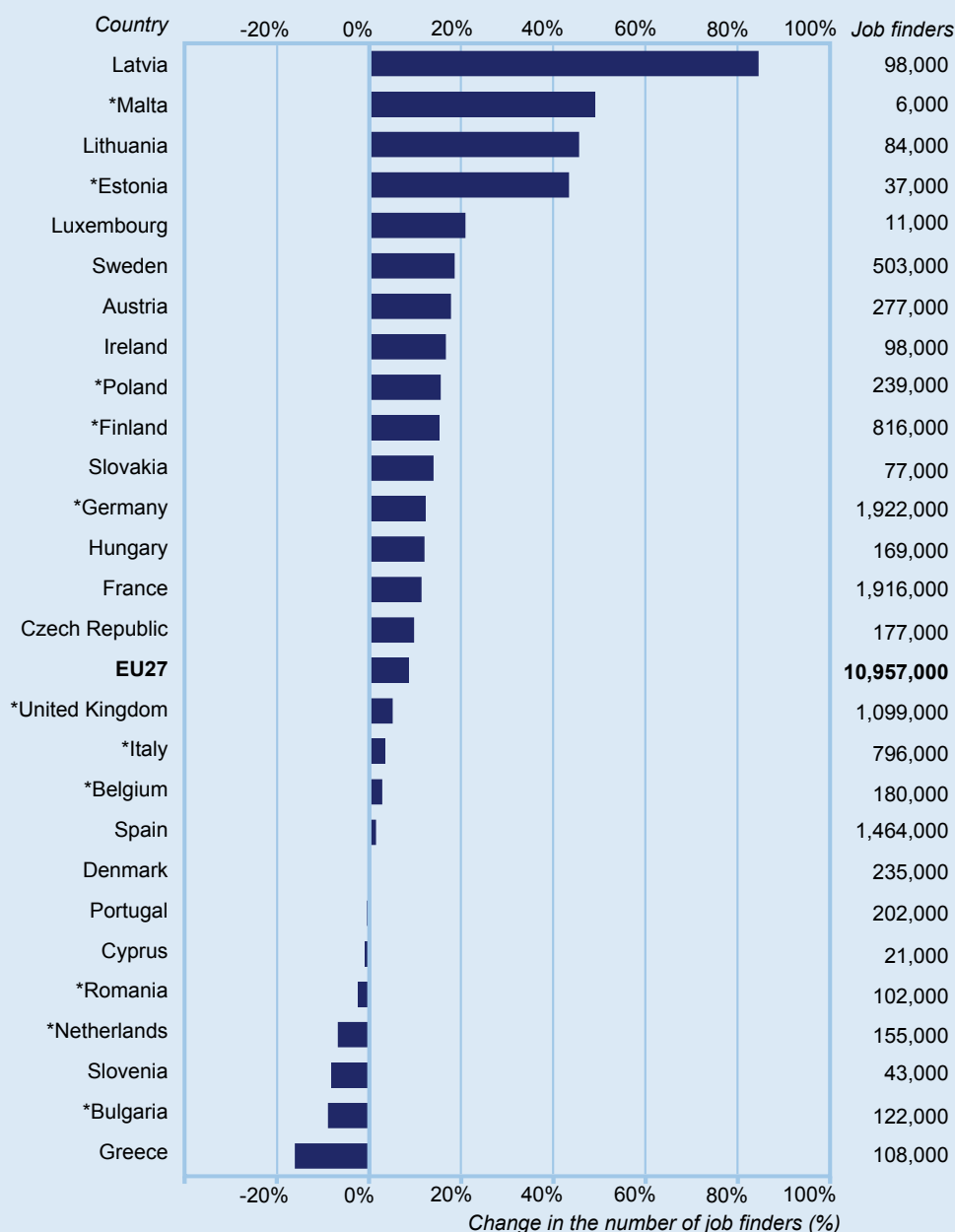
*Inflow of job vacancies in PES across the EU increased, but many PES still report decline ...*

The revival of the European economy can be seen not only in the number of stock job vacancies and the number of job-finders, but also in the number of job vacancies regis-

Social Europe

**Chart 2: Change in the number of job-finders**

Percentages, 2010Q3 compared to 2009Q3, absolute numbers of 2010Q3



Source: EU LFS data - own calculations (27 countries)

\* 2010Q2 compared to 2009Q2

Job-finders are employed at the moment of the survey and have been employed for at most three months



# European Vacancy Monitor

Issue no. 2/2011 | March 2011

tered by PES. Job vacancies registered by PES only cover a share of the job vacancy market - not all job vacancies are registered by PES. A first estimate of the market range of PES on the basis of available data shows that 25-30 percent of all job vacancies are reported to PES (see definitions in annex A2). However, there are huge differences between countries. The market range of PES will be studied in more detail in subsequent bulletins. The number of new job vacancies (inflow) in PES showed an increase of 6% in total between the third quarter of 2009 and the third quarter of 2010 (chart 3), which is a small increase when compared to the increase in total (PES and non-PES) stock job vacancies. In this period, the number of new registered job vacancies in the 15 countries (for which data is available) amounts to almost 1.4 million. However, this Germany alone accounts for 41% of this figure. Although there is a growth in new PES job vacancies in Lithuania, Germany, Belgium and Hungary during this period, there is a decline in new PES job vacancies in 10 of the 15 countries examined in this bulletin.

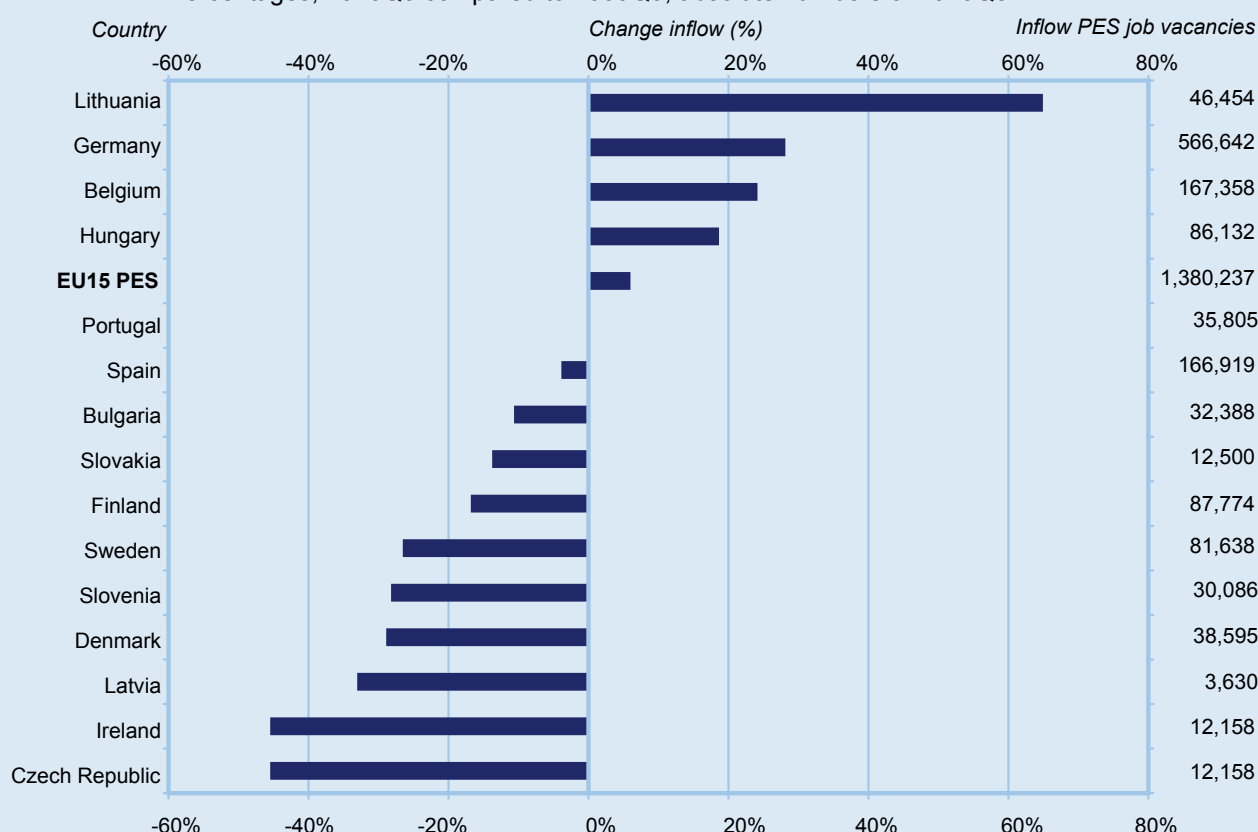
## Strong recovery in temporary agency work in 2010

Temporary agency work is an important indicator of the developments in the economy and the labour market. If a company does not perform well, the employers will first cut down on agency workers who are not on the company payroll. When the outlook becomes more favourable again, employers will not hire permanent staff, but instead they would typically start hiring temporary agency workers as this creates less economic risk for the company. Unfortunately, data about job vacancies filled by temporary work agencies are very scarce.

Randstad includes data about their total number of job vacancies on their own website. This data only concerns open positions that cannot be filled directly from their existing pool of candidates. Their figures are based on daily measurements of the number of open job vacancies available online (stock figures). It should also be noted that job vacancies shown online can be advertised by more than one subsidiary of the company. Nevertheless, the overview still

**Chart 3: Change in the inflow of PES job vacancies**

Percentages, 2010Q3 compared to 2009Q3, absolute numbers of 2010Q3



Source: PES data - own calculations (15 countries)

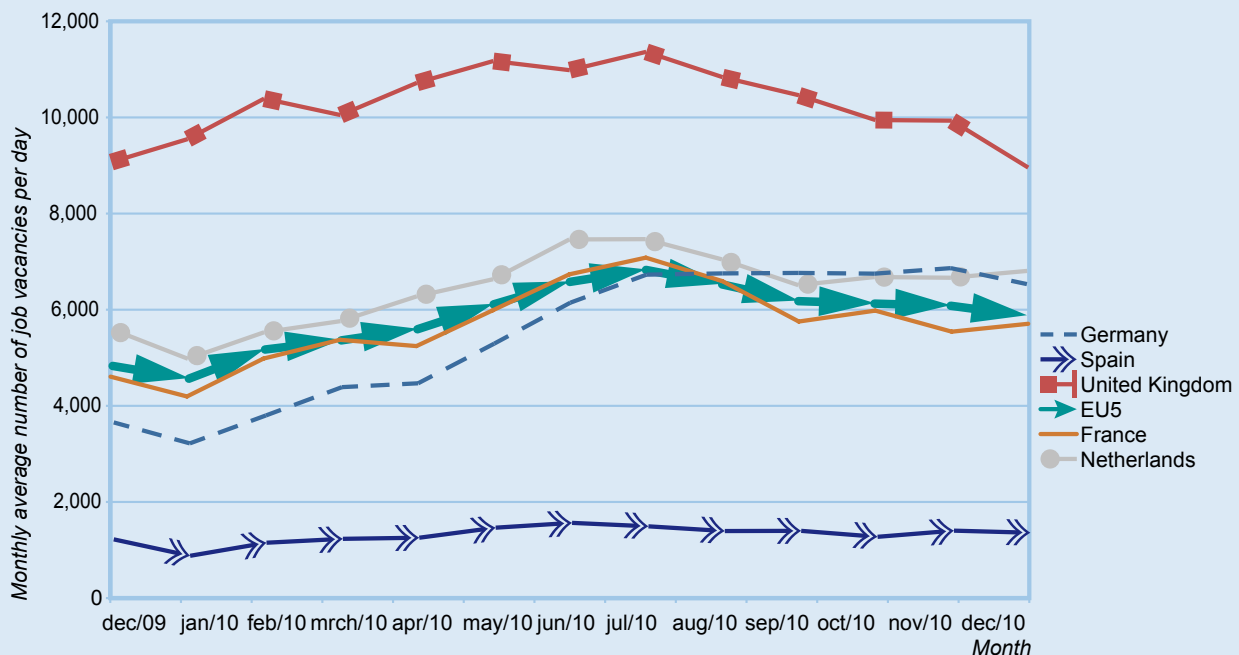
Inflow of PES registered job vacancies refers to new job vacancies which have been registered in a certain quarter

# European Vacancy Monitor

Issue no. 2/2011 | March 2011

**Chart 4: Development of temporary work agency job vacancies (Randstad)**

Monthly average number of job vacancies per day, December 2009 - December 2010



Source: Randstad (5 countries)

The data only shows job vacancies that cannot be filled directly from Randstad's existing pool of candidates.

The data is based on daily measurements of the number of open job vacancies available online.

serves as an early indicator of developments in the economy and the labour market. The figures relate to five countries with a relatively high penetration of temporary agency work and which therefore have a disproportionate share in the Randstad data- Germany, Spain, the United Kingdom, France and the Netherlands (chart 4).

These figures suggest a (very) rapid recovery of the demand for temporary agency workers in the first half of 2010, especially in Germany and Spain. The demand for temporary agency workers in the UK is recovering at a slower pace. After this very rapid recovery in the first half of 2010, the number of job vacancies on the Randstad web-site decreased again in the second half of 2010. The drop was mostly concentrated in the third quarter and was much less pronounced in the fourth quarter. The UK in particular suffered a large drop in demand for temporary agency workers in the second half of 2010, and the same held true for France. Germany and the Netherlands saw neither a decline nor an increase in demand.

The change in demand for temporary agency work is largely due to seasonal effects. A comparison between the data for December 2009 and December 2010 shows an increase of 22% in the number of open job vacancies, with a very high rise in Germany (78%). While in the United Kingdom the difference was negative (-1%), the overall picture for 2010 was positive.

## Overall growth in online job vacancies in 2010, with moderate growth in the third quarter

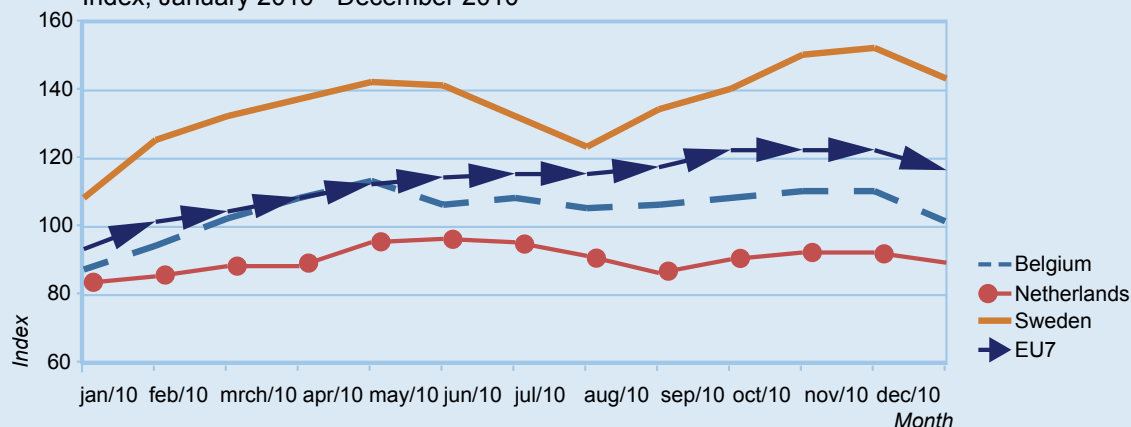
The same upward movement in 2010 is visible for online job vacancies in the Monster Employment Index (MEI). The MEI Europe provides monthly insight into on-line recruitment trends across the European Union. The Index is based on 1,400 corporate career sites and job boards, providing an indication of the (on-line) demand for specific occupations. The most current data published on the site applies to seven countries: Belgium, France, Germany, Italy, the Netherlands, Sweden and the United Kingdom. A comparison between January 2010 and January 2011 showed an overall increase in the number of job vacancies for these seven countries of 25% (chart 5). The Netherlands showed a relatively limited growth of 7%, while the United Kingdom showed 15% growth. However, the growth in online job vacancies was moderate in the third quarter. In Sweden the number of online job vacancies actually declined in the third quarter of 2010.

# European Vacancy Monitor

Issue no. 2/2011 | March 2011

**Chart 5: Development of online job vacancies (Monster Employment Index)**

Index, January 2010 - December 2010



Source: Monsterboard, selection of countries. Base (100) is the average number of only job vacancies December 2004 - November 2005. Only the countries which show the most deviant pattern from the EU average are displayed. EU average is based on 7 countries. The Monster Employment Index is based on a review of millions of job vacancies culled from a selection of corporate career sites and job boards across the EU.

## III. OCCUPATIONS

### *Growth of open job vacancies in 'trade and repair', manufacturing and 'other business services'.*

The growth in the number of open job vacancies in 16 countries was 28% when comparing the third quarter of 2009 with the third quarter of 2010. Chart 6 shows a relatively high growth of open job vacancies in the trade and repair sector (42%), manufacturing (36%) and other business services (32%). The transport sector saw a relatively modest growth of 12%. The number of open job vacancies in the construction sector was 12% lower in 2010Q3 when compared to 2009Q3.

### *Hiring patterns also show a revival in the demand for labour in the trade, industry and business sectors*

An increase in job vacancies in certain sectors does not imply an increase in job-finders in these sectors. To give a more dynamic picture of the labour market, the number of job-finders per sector is presented in chart 7. In almost all sectors, the number of job-finders at the end of this period was higher than the number of job-finders in the third quarter of 2009. The JVS and the LFS both show that the demand for labour increased. In particular, when compared to the previous year, the third quarter of 2010 saw an increase in the number of job-finders in the industrial sector (33%), in ICT (24%), in business services other than finance (15%) and in the trade and repair sector (12%). Looking at job vacancies (JVS), the conclusion is that sectors with a relatively

high growth in the number of stock job vacancies also have a relatively high growth in the number of job-finders. This connection is particularly visible for the industry, trade and other business services sectors. While the number of open job vacancies declined in the construction sector, the growth in the number of job-finders in this sector is nevertheless positive, although below average. This could be due to increased dynamism in this sector (more people are switching jobs within the sector) or an increased share of temporary workers.

There is no JVS data on job vacancies in the (semi-)public sector, but the LFS does give a picture of the number of job-finders in this sector. Public administration (-9%), education (-6%) and human health and social work (-5%) show a decline in the number of job-finders when compared to the same quarter in 2009. The number of job-finders in the agriculture and fishing sector also declined by 3%.

### *Demand for specific occupations shows growth in certain sectors - including operators, assemblers and managers of plant and machinery, and also for managers and senior officials*

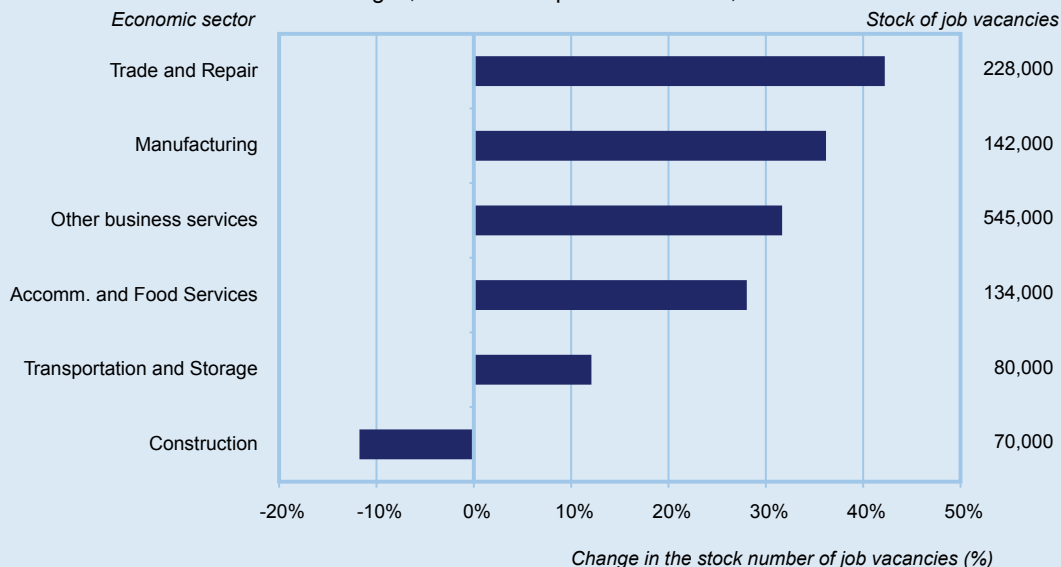
To sum up the findings - sectoral developments in labour demand are reflected in the demand for certain occupations. Looking at large occupational groups, a positive development is primarily seen in the demand for 'plant and machine operators and assemblers', reflecting an increase in labour demand in the industry sector. The demand for this type of occupation has grown rapidly in 2010. There is also an increasing demand for legislators (senior civil servants), senior officials and managers. As the overall demand for labour in the public sector did not increase, so the increase in

# European Vacancy Monitor

Issue no. 2/2011 | March 2011

**Chart 6: Change in the stock of job vacancies by economic sector (NACE1)**

Percentages, 2010Q3 compared to 2009Q3, with absolute numbers of 2010Q3



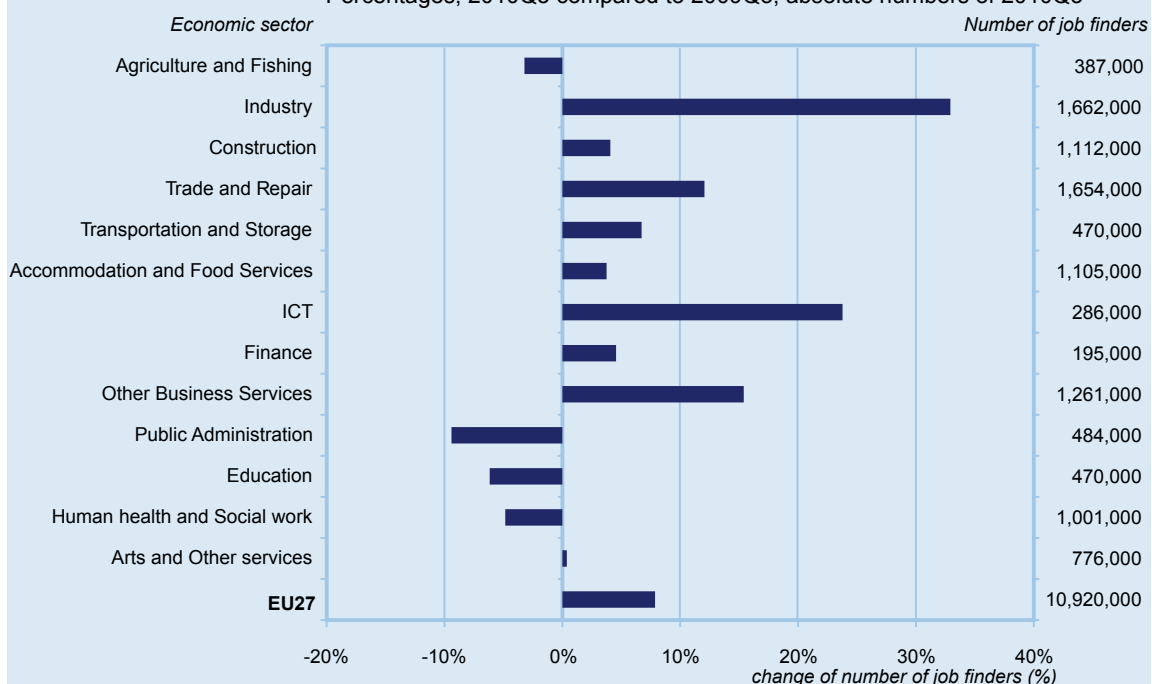
Source: EU JVS data - own calculation (16 countries)

Countries included: Bulgaria, Czech Republic, Germany\*, Estonia\*, Greece, Cyprus\*, Latvia, Lithuania, Netherlands, Portugal, Romania, Slovenia, Slovakia, Sweden, United Kingdom. (\* = estimate)

The stock of job vacancies is the number of job vacancies measured at a certain moment in time. The figures for France and Italy are estimated by combining vacancy ratios from Eurostat together with national statistics on employment by economic sector, and company size. To compare the data for 16 countries specific sectors had to be taken together and the sectors agriculture, mining, electricity, waterworks and government had to be excluded from the analysis. There was no data available for these sectors.

**Chart 7: Change in the number of job-finders by economic sector (NACE 1)**

Percentages, 2010Q3 compared to 2009Q3, absolute numbers of 2010Q3



Source: EU LFS data - own calculations (27 countries)

Job-finders are employed at the moment of the survey and have been employed for at most three months. The number of job-finders per economic sector (NACE) is used to present a more dynamic picture of the labour market (LFS). All economic sectors are included.



# European Vacancy Monitor

Issue no. 2/2011 | March 2011

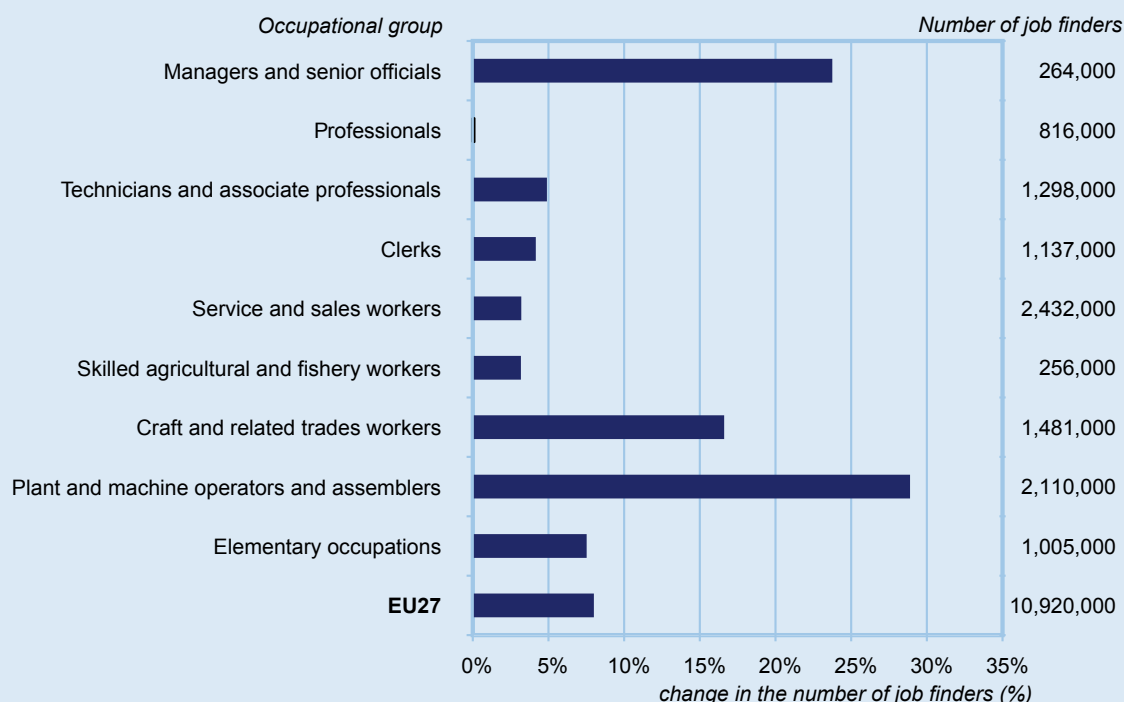
demand for this occupational group is expected to be mainly attributed to managers. Management occupations are present in all sectors and the growth in demand for managers therefore reflects the overall increase in labour demand. The third group with a strong growth in demand is 'craft and related trade' workers. Obviously, this reflects the growth of labour demand in the trade and repair sector. The Labour Force Survey, the information of public employment services and the Manpower Employment Index (MEI) show the same picture. It is striking that only the MEI shows an increase in the number of job vacancies for elementary occupations. In general there are no occupational groups with a decline. The only area where the number of job-finders did not grow was 'professionals'.

*The relative importance of different occupational groups remained similar across the EU. There was a consistent demand for both 'service and sales' workers and 'plant and machine operators'.*

The occupational groups where most people found jobs remained the same in the third quarter of 2010 as one year earlier (see chart 8). The service workers and shop and market sales workers group were still the largest occupational group (2.4 million job-finders in 2010Q3), followed by plant and machine operators and assemblers (2.1 million). While there was a significant increase in demand for operators, assemblers and managers of plant and machinery, there was also an increase in demand for 'white collar' managers and senior officials.

Social Europe

**Chart 8: Change in the number of job-finders by occupational group (ISCO 1)**  
Percentages, 2010Q3 compared to 2009Q3, absolute numbers of 2010Q3



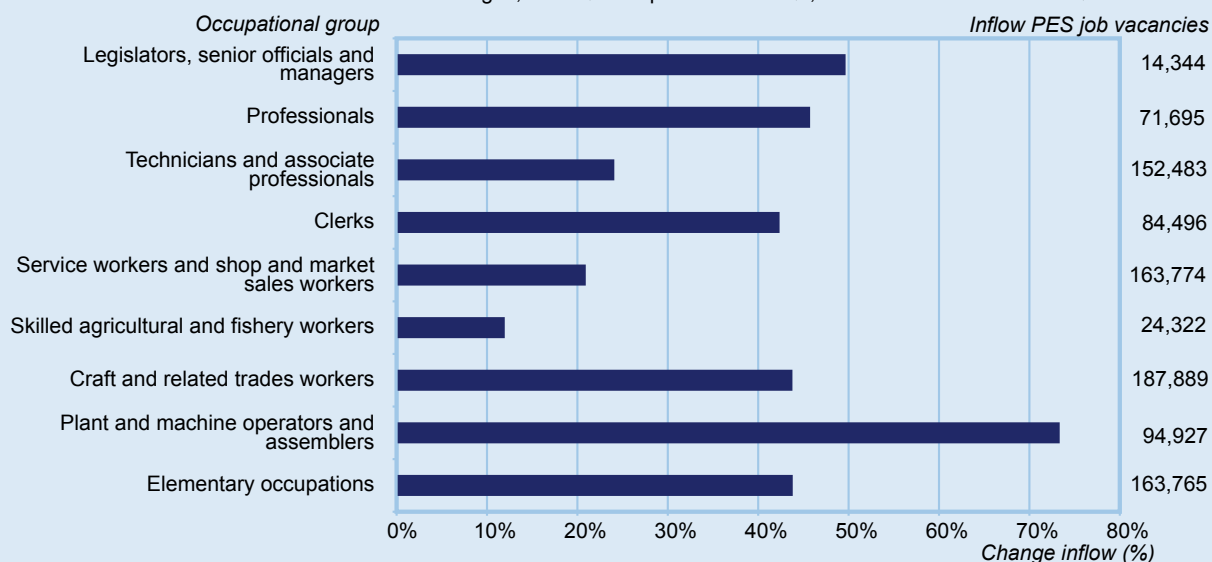
Source: EU LFS data - own calculations (27 countries)

The LFS contains information about the number of job-finders by occupational group per quarter. Job-finders are employed at the moment of the survey and have been employed for at most three months.

# European Vacancy Monitor

Issue no. 2/2011 | March 2011

**Chart 9: Change in the inflow of PES job vacancies by occupational group (ISCO1)**  
Percentages, 2010Q3 compared to 2009Q3, absolute numbers of 2010Q3



Source: PES - own calculations (10 countries included)

Countries included: Germany, Denmark, Estonia, Finland, Lithuania, Latvia, Portugal, Sweden, Slovenia and Slovakia.

Data on the inflow of job vacancies at public employment services per occupational group is comparable for 10 countries, including Germany with a high share in this total. Inflow of PES registered job vacancies refers to new vacancies which have been registered in a certain quarter.

The LFS also showed an increasing number of job-finders which differed between occupational groups (chart 8). The occupational groups with the highest increase in job-finders in the third quarter of 2010 compared to the third quarter of 2009 were plant and machine operators and assemblers (29%) and managers and senior officials (24%). This reflects the growth in the industrial sector and the overall growth in labour demand. Also, significantly more craft and related traders workers found a job in the third quarter of 2010, compared to the third quarter of 2009 (17%). Professionals were the only group that stayed at the same level and showed no growth.

## ***New PES job vacancies: a striking increase in similar sectors***

Data on the inflow of job vacancies at the Public Employment Services (PES) for different occupational groups is compared for 10 countries in chart 9, including Germany which has a high proportion of this total.

The inflow of new job vacancies at the PES reveals that plant and machine operators increased relatively strongly between the third quarter of 2009 and the third quarter of 2010 (73%), and also new jobs for legislators, senior officials and managers went up during this period (50%). This picture corresponds to the increase in the number of job-finders in these occupations. The growth of job vacancies for skilled agricultural and fishery workers was relatively modest (12%). It is not unlikely that PES job vacancies have a diffe-

rent profile compared to the job vacancy market as a whole. This is an issue which will be studied in more detail in later bulletins.

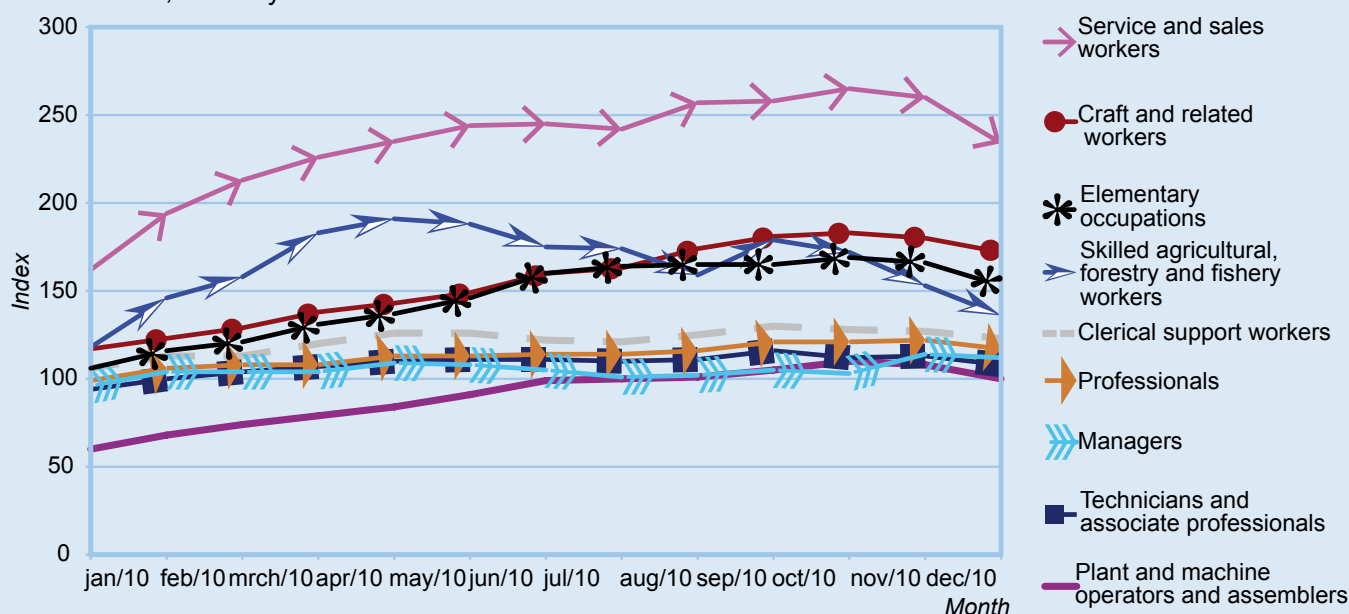
## ***Service and sales workers remain in demand online***

The **Monster Employment Index** for seven countries saw a 25% increase between January 2010 and December 2010 (see section II). Chart 10 shows an extreme increase for plant and machine operators and assemblers (80%), followed by service and sales workers (60%) and elementary occupations (56%), and craft and related workers (53%). The changes in the other occupational groups are smaller (18-30%). Chart 10 shows that the level of online demand for service and sales workers remained high throughout 2010, compared to other occupational groups. A comparison of the online demand for service and sales workers with job vacancies advertised on the PES shows that recruitment of this occupational group may be mostly happening online.

# European Vacancy Monitor

Issue no. 2/2011 | March 2011

**Chart 10: Development of online job vacancies by occupational group (ISCO 1)**  
(Monster Employment Index)  
Index, January 2010 - December 2010



Source: Monsterboard (7 countries)

Base index (100) = average December 2004 - November 2005

Countries included: Belgium, France, Germany, Italy, Netherlands, Sweden and United Kingdom. The Monster Employment Index is based on a review of millions of job vacancies culled from a selection of corporate career sites and job boards across the EU.

**Current demand for occupations:  
highest demand is for assemblers,  
manufacturing labourers, transport  
labourers and freight handlers**

The detailed analysis of occupations shows that there is demand for assemblers, manufacturing labourers, transport labourers and freight handlers. The demand for people in this type of occupations grew rapidly throughout Europe. In the third quarter of 2010, Public Employment Services (PES) job vacancies were mainly for 'shop and sales persons', demonstrators, 'technical and commercial sales representatives', and heavy truck and lorry drivers. These images fit the picture of the development per sector, where there is an increasing demand in industry, trade and repair, and businesses other than finance.

The number of job-finders in 400 occupational groups has been studied in detail. The top 25 occupations with the highest number of job-finders in the third quarter of 2010 have been selected (chart 11). The occupation most in demand across the EU, in absolute numbers, is for shop, stall and market salespersons and demonstrators. It had 852,000 job-finders in the third quarter of 2010.

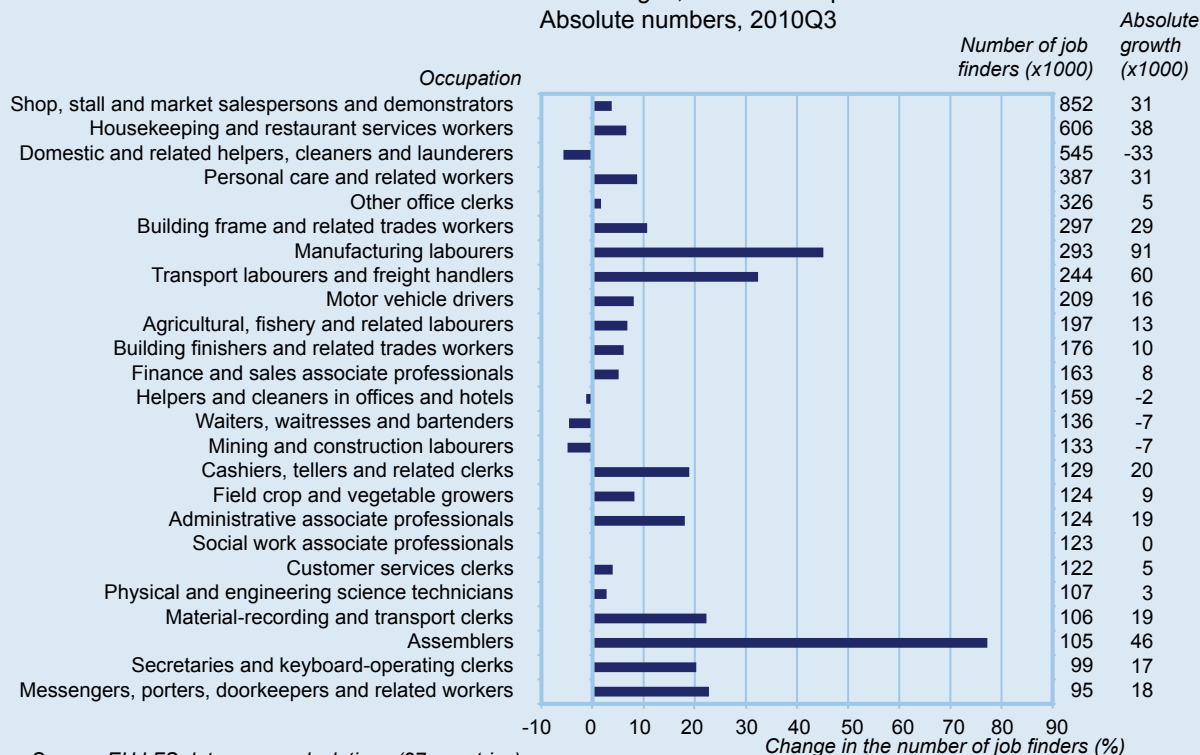
For each of these top 25 occupations the growth rate is presented. The increase in the total number of job-finders between 2009Q3 and 2010Q3 is 8% (see section II). The highest growth of these top 25 occupations is shown in assemblers (105,000 job-finders in 2010Q3 with a growth rate of 77%), manufacturing labourers (293,000 job-finders in 2010Q3 with a 45% growth rate) and transport labourers and freight handlers (244,000 job-finders in 2010Q3 with a 32% growth rate). So, for these occupations, there is a high demand in absolute numbers and also a significant growing demand.

There is a decrease in demand for some occupations. Although domestic and related helpers, cleaners and laundries still have the third highest number of job-finders (see chart 12), the total number of job-finders in this category decreased by 6%. Also, there was a decrease in the number of 'waiters, waitresses and bartenders' who found a job (-5%). Due to the decrease in demand for labour in the construction sector, the demand for mining and construction labourers also decreased by 5%.

**Chart 11: Top 25 number of job-finders by occupation (ISCO 4)**

Percentages, 2010Q3 compared to 2009Q3

Absolute numbers, 2010Q3



Source: EU LFS data - own calculations (27 countries)

Job finders are employed at the moment of the survey and have been employed for at most three months.

While all countries need plant and machine operators, assemblers and 'elementary occupations' (occupations with modest educational requirements), the demand for certain occupations at the PES varies greatly between countries (section VI). For example, the demand shown by the PES for professional managers, professionals, technicians and associate professionals is relatively high in Finland, Sweden and Denmark, while the demand for these professionals is relatively low in Portugal, Austria and Estonia. In Ireland, the United Kingdom and Portugal, the demand in the PES for clerks and sales employees is relatively high. The demand for people working in sales is relatively low in Lithuania, Latvia, the Czech Republic, Slovenia and Estonia. In Eastern European countries there is a higher demand in the PES for manual workers in agriculture, fisheries and crafts.

## IV. BOTTLENECKS

### IV.1. Bottlenecks per country

Two statistical indicators will be used in this publication to identify bottlenecks in the European labour market - firstly, the ratio of unemployment (LFS) to the stock of job vacancies (JVS), and secondly the ratio of the number of unemployed registered by the PES to the number of job vacancies registered by the PES. The ratio of the LFS to the JVS is calculated for the private sector, excluding agriculture, public services and certain other services, because of a lack of data for these sectors.

A relatively 'tight' labour market is indicated by a lower number of unemployed people per job vacancy (see chart 12). The average for 20 EU countries is 9 unemployed people per job vacancy. There is a low ratio for Germany, the Netherlands, Austria, Luxembourg, Cyprus and the United Kingdom, indicating a tighter labour market in these countries.

Chart 12 also shows the change in the ratio of unemployment and the stock of job vacancies over the twelve month period. The ratio decreased for 11 of the 19 countries. For all countries, the net result is a decline of two

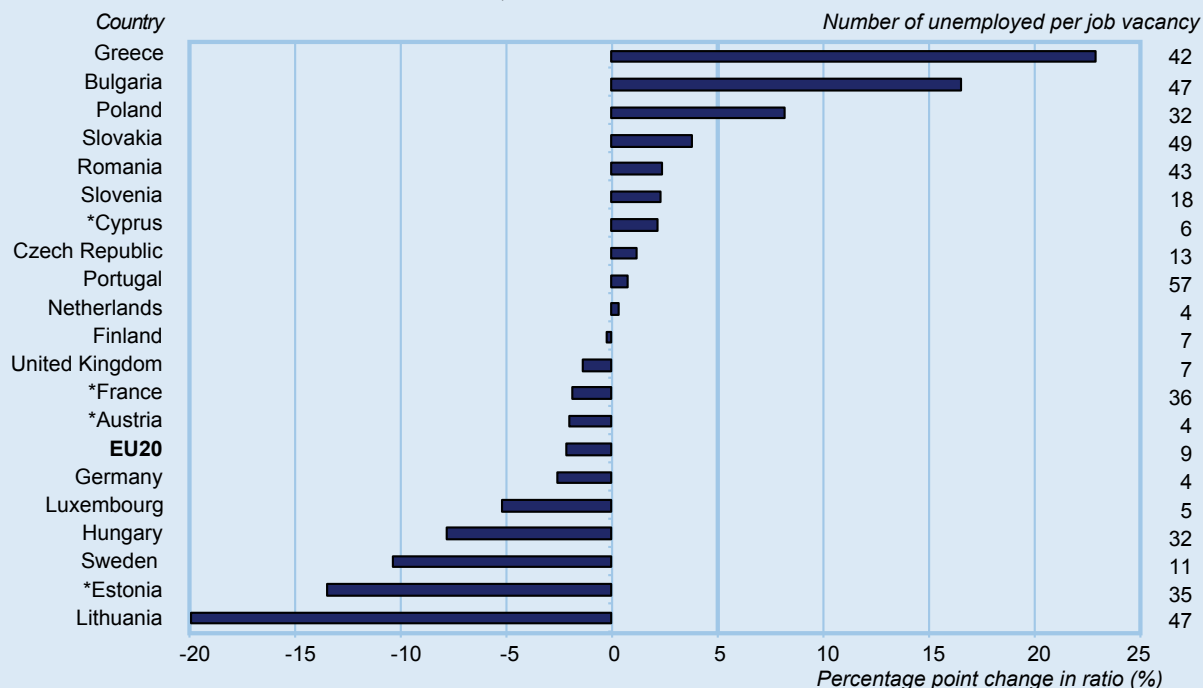


# European Vacancy Monitor

Issue no. 2/2011 | March 2011

**Chart 12: Change in the ratio of stock unemployed (LFS) to stock of vacancies (JVS)**

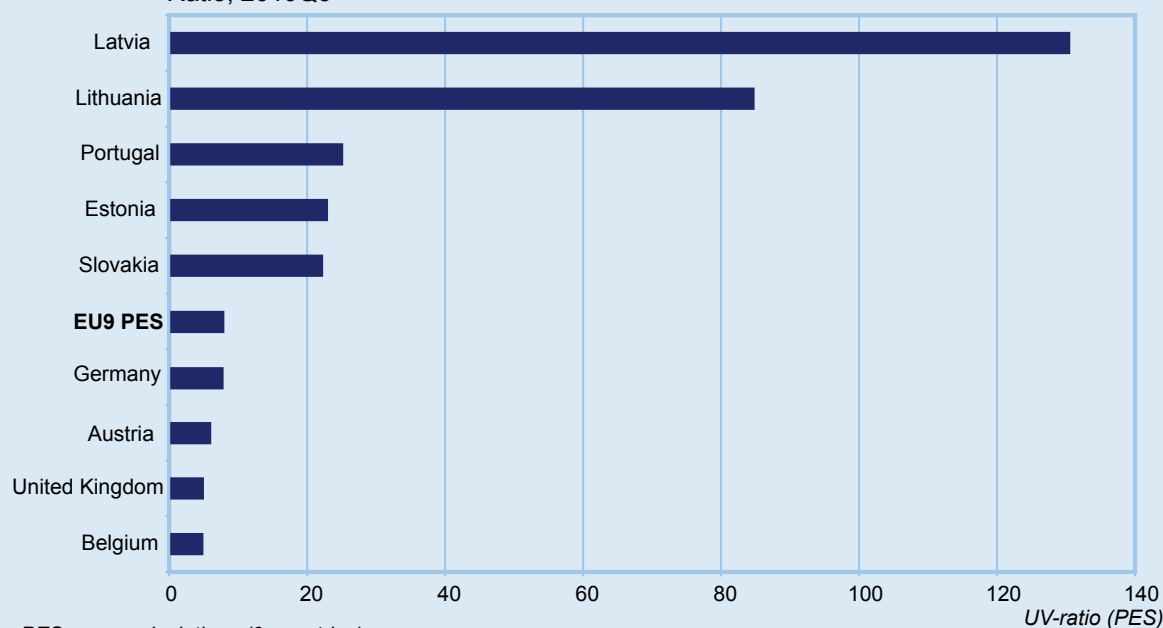
Percentage point change in ratio, 2010Q3 compared to 2009Q3,  
absolute numbers of 2010Q3



Source: Eurostat LFS and JVS data - own calculations (20 countries), \* indicates the stock of vacancies is estimated. The higher the UV-ratio, the less labour market shortage. A UV-ratio below 1 indicates excess demand and a UV-ratio above 1 indicates excess supply.

**Chart 13: Stock unemployment PES / stock job vacancies PES by country**

Ratio, 2010Q3



Source: PES - own calculations (9 countries)

The higher the UV-ratio, the less labour market shortage. A UV-ratio below 1 indicates excess demand and a UV-ratio above 1 indicates excess supply. The results should be approached with some reservations, because there are significant differences in administrative procedures of PES between countries. For this reason, stock figures of job vacancies of PES are very difficult to compare. However, this specific uv-ratio concerns an important indicator in some countries and for this reason the results are presented. Further study will be performed.

percentage points in the ratio. The highest decreases in the ratio were in Greece, Lithuania, Estonia, and Sweden, indicating a tighter labour market. A strong increase in the ratio between the number of unemployed and job vacancies is seen in Bulgaria and Poland, which indicates that while the number of unemployed has grown, the demand for labour has not grown proportionally. This could imply an increasingly insufficient demand for unemployed people.

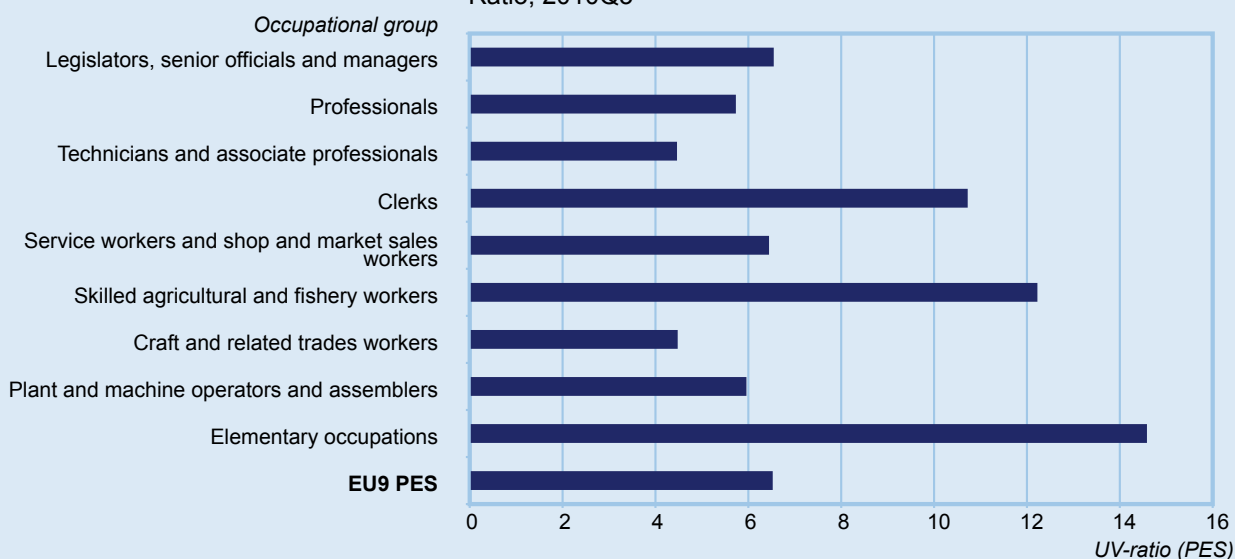
Chart 13 displays the ratio of **registered unemployed in the PES** and registered job vacancies in the PES (both stock figures), with a breakdown by country. This information is available for nine countries. A high ratio is calculated for Latvia and Lithuania, Portugal, Estonia and Slovakia. Austria, Germany, Belgium, and the United Kingdom are all below average. In those countries there are relatively few unemployed people registered at the PES compared to the number of available job vacancies of the PES.

## IV.2. Bottleneck occupations

*Due to growing demand, more difficulties recruiting craft and related trade workers, technicians and associate professionals and plant and machine operators and assemblers*

The ratio of **registered unemployed to registered job vacancies per occupational group** is highest for 'elementary occupations', skilled agricultural and fishery occupations, and clerks. This indicates that job vacancies for such occupations are less difficult to fill than other occupations (chart 14). Job vacancies for craft and related trade workers, technicians and associate professionals, professionals and plant and machine operators and assemblers are more difficult to fill than other occupational groups, given that for these groups of occupations there are less unemployed with skills relevant to employers' needs.

**Chart 14: Stock unemployment PES / stock job vacancies PES by occupational group (ISCO1)**  
Ratio, 2010Q3

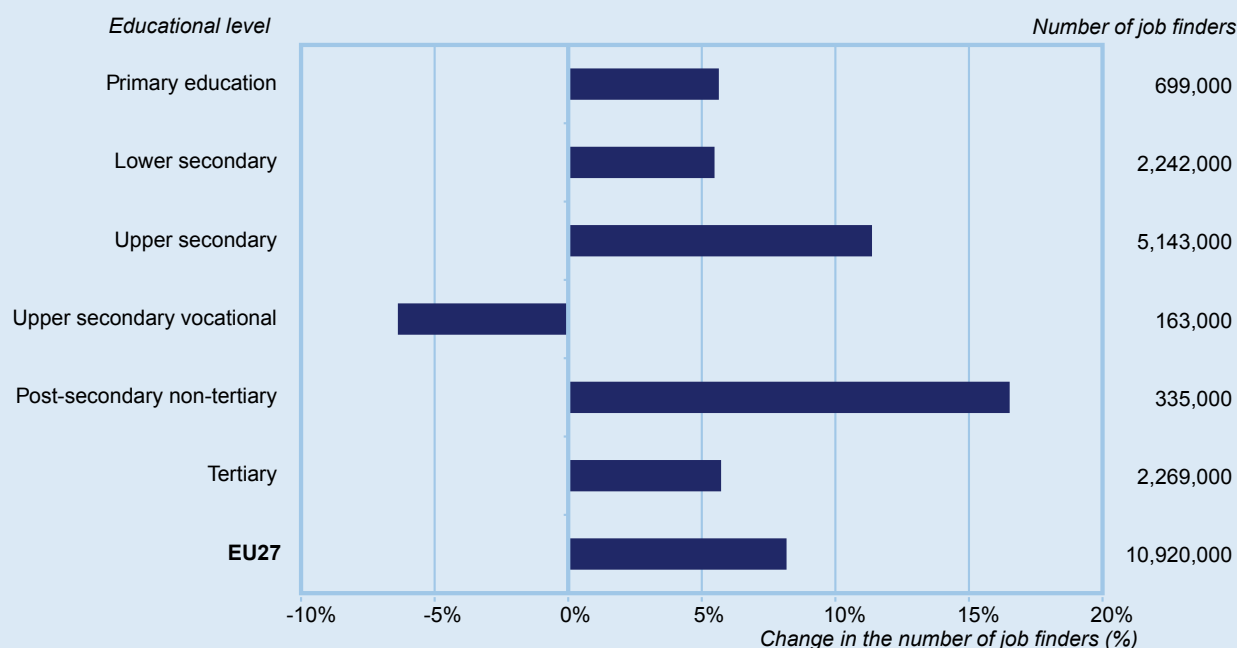


Source: PES - own calculations (9 countries)

Countries included: Austria, Belgium, Estonia, Germany, Latvia, Lithuania, Portugal, Slovakia, United Kingdom.

The ratio between the number of registered unemployed at PES and PES registered job vacancies (UV-ratio) indicates labour market shortages. The higher the ratio, the less labour market shortage. A UV-ratio below 1 indicates excess demand and a UV-ratio above 1 indicates excess supply.

**Chart 15: Change in the number of job-finders by educational level (ISCED1)**  
Percentages, 2010Q3 compared to 2009Q3, absolute numbers of 2010Q3



Source: Eurostat LFS data - own calculations (27 countries)

Job finders are employed at the moment of the survey and have been employed for at most three months. The International Standard Classification of Education (ISCED) is used, which consists of six levels of education.

## V. EDUCATION AND SKILLS

The **educational level of job-finders** is an indicator of the educational level required for job vacancies. However, there is some empirical evidence that the requirements of employers for job vacancies are often higher than the educational attainment of the people who ultimately fill their job vacancy. But even if this is sometimes the case, the education of job-finders remains a reasonable indicator for the educational level required for job vacancies.

### *Benefits for job-seekers with degrees or upper secondary level education*

In the third quarter of 2010, 27% of all job-finders had an education at primary or lower secondary level (ISCED level 1 and 2). About half (52%) of the job-finders had an education at upper secondary or post-secondary level (ISCED level 3, 4 and 5). 21% of all job-finders in the third quarter held a degree (ISCED level 6).

There was an 8% overall rise in the number of job-finders taken all educational levels together. Distinguishing between educational levels, however, shows a decrease in the number of job-finders at the upper secondary vocational level (chart 15). There are more than 5 million job-finders with an upper secondary education in the third quarter of 2010, representing a growth of over 10% compared to the same quarter in 2009. The growth of job-finders with a degree is smaller. This difference corresponds to sectoral and occupational developments in labour demand. Industry and trade sectors have grown, resulting in increased demand for occupations which do not require a tertiary education, such as plant operators and assemblers. The growth in job-finders with a tertiary education might be explained by the growth in the number of managers who have found a job.

## VI. LISTINGS OF MOST DEMANDED OCCUPATIONS PER COUNTRY

### 1. Top 25 Growth Occupations in the EU-27 (LFS job-finders)

Country	Top-25 growth of job-finders in 2010Q3 compared to 2009Q3 or 2010Q2 compared to 2009Q2, per country
EU 2010Q3 and 2010Q2	1. Manufacturing labourers 2. Transport labourers and freight handlers 3. Assemblers 4. Housekeeping and restaurant services workers 5. Personal care and related workers 6. Shop, stall and market salespersons and demonstrators 7. Building frame and related trades workers 8. Electrical and electronic equipment mechanics and fitters 9. Metal moulders, welders, sheet-metal workers, structural-metal preparers, and related trades workers 10. Chemical-processing-plant operators 11. Cashiers, tellers and related clerks 12. Material-recording and transport clerks 13. Administrative associate professionals 14. Heavy truck and lorry drivers 15. Production and operations managers 16. Messengers, porters, doorkeepers and related workers 17. Technical and commercial sales representatives 18. Blacksmiths, tool-makers and related trades workers 19. Secretaries and keyboard-operating clerks 20. Food and related products machine operators 21. Motor vehicle drivers 22. Motor vehicle mechanics and fitters 23. Computing professionals 24. Painters, building structure cleaners and related trades workers 25. Machinery mechanics and fitters
AT 2010Q3	1. Shop, stall and market salespersons and demonstrators 2. Finance and sales associate professionals not elsewhere classified 3. Other office clerks 4. Agricultural- or industrial-machinery mechanics and fitters 5. Building construction labourers 6. Motor vehicle mechanics and fitters 7. Physiotherapists and related associate professionals 8. Building and related electricians 9. Managers of small enterprises not elsewhere classified 10. Insurance representatives 11. Plumbers and pipe fitters 12. Nursing associate professionals 13. Cashiers and ticket clerks 14. Production and operations managers in construction 15. Carpenters and joiners 16. Cabinetmakers and related workers 17. Computer systems designers, analysts (and programmers) 18. Computer assistants 19. College, university and higher education teaching professionals 20. Architects, town and traffic planners 21. Transport labourers and freight handlers 22. Decorators and commercial designers 23. Receptionists and information clerks 24. Building finishers and related trade workers not elsewhere classified 25. Door-to-door and telephone salespersons
BE 2010Q2	1. Assemblers 2. Other specialist managers 3. Building frame and related trades workers 4. Computing professionals 5. Production and operations managers 6. Painters, building structure cleaners and related trades workers 7. Personal care and related workers 8. Mining and construction labourers 9. Field crop and vegetable growers 10. Textile, garment and related trades workers 11. Metal- and mineral-products machine operators 12. Writers and creative or performing artists 13. Metal-processing plant operators 14. Agricultural and other mobile plant operators 15. Secondary education teaching professionals 16. Fashion and other models 17. Archivists, librarians and related information professionals 18. Legal professionals 19. Nursing and midwifery associate professionals 20. Metal moulders, welders, sheet-metal workers, structural-metal preparers, and related trades workers 21. Administrative associate professionals 22. Other teaching professionals 23. Building caretakers, window and related cleaners 24. Miners, shot firers, stone cutters and carvers 25. Ship and aircraft controllers and technicians
BG 2010Q2	1. Housekeeping and restaurant services workers 2. Shop, stall and market salespersons and demonstrators 3. Other personal services workers 4. Cashiers, tellers and related clerks 5. Textile-, fur- and leather-products machine operators 6. Material-recording and transport clerks 7. Secretaries and keyboard-operating clerks 8. Agricultural and other mobile plant operators 9. Nursing and midwifery associate professionals 10. Customer services clerks 11. Electrical and electronic equipment mechanics and fitters 12. Metal moulders, welders, sheet-metal workers, structural-metal preparers, and related trades workers 13. Health associate professionals (except nursing) 14. Other machine operators not elsewhere classified 15. Directors and chief executives 16. Legal professionals 17. Business professionals 18. Building caretakers, window and related cleaners 19. Legislators and senior officials 20. Pre-primary education teaching associate professionals 21. Other craft and related trades workers 22. Architects, engineers and related professionals 23. Wood treaters, cabinet-makers and related trades workers 24. Machinery mechanics and fitters 25. Secondary education teaching professionals



# European Vacancy Monitor

Issue no. 2/2011 | March 2011

CY 2010Q3	1. Legal professionals 2. Artistic, entertainment and sports associate professionals 3. Business professionals 4. Protective services workers 5. Garbage collectors and related labourers 6. Painters, building structure cleaners and related trades workers 7. Metal moulders, welders, sheet-metal workers, structural-metal preparers, and related trades workers 8. Secretaries and keyboard-operating clerks 9. Mining and construction labourers 10. Building frame and related trades workers 11. Cashiers, tellers and related clerks 12. Housekeeping and restaurant services workers 13. Transport labourers and freight handlers 14. Numerical clerks 15. Administrative associate professionals 16. Nursing and midwifery associate professionals 17. Personal care and related workers 18. Business services agents and trade brokers 19. Customs, tax and related government associate professionals 20. Food processing and related trades workers 21. Machinery mechanics and fitters 22. Other specialist managers 23. Ship and aircraft controllers and technicians 24. Other teaching professionals 25. Primary and pre-primary education teaching professionals
CZ 2010Q3	1. Shop, stall and market salespersons and demonstrators 2. Waiters, waitresses and bartenders 3. Industrial robot operators 4. Cooks 5. Clearing and forwarding agents 6. Tool-makers and related workers 7. Machine-tool setters and setter-operators 8. Transport labourers and freight handlers 9. Business professionals not elsewhere classified 10. Machine-tool operators 11. Administrative secretaries and related associate professionals 12. Tellers and other counter clerks 13. Sweepers and related labourers 14. Motorised farm and forestry plant operators 15. Computer assistants 16. Building construction labourers 17. Agricultural- or industrial-machinery mechanics and fitters 18. Electrical mechanics fitters and services 19. Mechanical engineering technicians 20. Heavy truck and lorry drivers 21. Chemical engineering technicians 22. Technical and commercial sales representatives 23. Forestry labourers 24. Wood-products machine operators 25. Bookkeepers
DE 2010Q2	1. Manufacturing labourers 2. Building frame and related trades workers 3. Shop, stall and market salespersons and demonstrators 4. Transport labourers and freight handlers 5. Metal moulders, welders, sheet-metal workers, structural-metal preparers, and related trades workers 6. Material-recording and transport clerks 7. Machinery mechanics and fitters 8. Blacksmiths, tool-makers and related trades workers 9. Finance and sales associate professionals 10. Other personal services workers 11. Electrical and electronic equipment mechanics and fitters 12. Building finishers and related trades workers 13. Administrative associate professionals 14. Other office clerks 15. Other machine operators not elsewhere classified 16. Business services agents and trade brokers 17. Mining and construction labourers 18. Cashiers, tellers and related clerks 19. Agricultural, fishery and related labourers 20. Painters, building structure cleaners and related trades workers 21. Social work associate professionals 22. Motor vehicle drivers 23. Personal care and related workers 24. Managers of small enterprises 25. Field crop and vegetable growers
DK 2010Q3	1. Administrative associate professionals 2. Housekeeping and restaurant services workers 3. Physical and engineering science technicians 4. Finance and sales associate professionals 5. Transport labourers and freight handlers 6. Artistic, entertainment and sports associate professionals 7. Health professionals (except nursing) 8. Material-recording and transport clerks 9. Agricultural, fishery and related labourers 10. Manufacturing labourers 11. Other office clerks 12. Agricultural and other mobile plant operators 13. Building finishers and related trades workers 14. Mining and construction labourers 15. Food processing and related trades workers 16. Street vendors and related workers 17. Crop and animal producers 18. Customer services clerks 19. Food and related products machine operators 20. Assemblers 21. Painters, building structure cleaners and related trades workers 22. Other teaching associate professionals 23. Writers and creative or performing artists 24. Public service administrative professionals 25. College, university and higher education teaching professionals
EE 2010Q3	1. Building construction labourers 2. Shop, stall and market salespersons and demonstrators 3. Data entry operators 4. Technical and commercial sales representatives 5. Cooks 6. Building frame and related trades workers not elsewhere classified 7. College, university and higher education teaching professionals 8. Production and operations managers in restaurants and hotels 9. Crane, hoist and related plant operators 10. Transport labourers and freight handlers 11. Building and fire inspectors 12. Sewing-machine operators 13. Concrete placers, concrete finishers and related workers 14. Buyers 15. Ships' deck officers and pilots 16. Architects, engineers and related professionals not elsewhere classified 17. Helpers and cleaners in offices, hotels and other establishments 18. Hairdressers, barbers, beauticians and related workers 19. Doorkeepers, watchpersons and related workers 20. Plasterers 21. Secretaries 22. Sweepers and related labourers 23. Sales and marketing managers 24. Prison guards 25. Accountants

# European Vacancy Monitor

Issue no. 2/2011 | March 2011

ES 2010Q3	1. Computer associate professionals 2. Electrical and electronic equipment mechanics and fitters 3. Finance and sales associate professionals 4. Transport labourers and freight handlers 5. Library, mail and related clerks 6. Housekeeping and restaurant services workers 7. Computing professionals 8. Messengers, porters, doorkeepers and related workers 9. Field crop and vegetable growers 10. Administrative associate professionals 11. Metal moulders, welders, sheet-metal workers, structural-metal preparers, and related trades workers 12. Manufacturing labourers 13. Health professionals (except nursing) 14. Food and related products machine operators 15. Other office clerks 16. Protective services workers 17. Rubber- and plastic-products machine operators 18. Customer services clerks 19. Printing-, binding- and paper-products machine operators 20. Teaching associate professionals 21. Safety and quality inspectors 22. Assemblers 23. Artistic, entertainment and sports associate professionals 24. Chemical-products machine operators 25. Optical and electronic equipment operators
FI 2010Q2	1. Cooks 2. Child-care workers 3. Heavy truck and lorry drivers 4. Manufacturing labourers 5. Builders 6. Dairy and livestock producers 7. Helpers and cleaners in offices, hotels and other establishments 8. Building caretakers 9. Motor vehicle mechanics and fitters 10. Meat- and fish-processing-machine operators 11. Transport labourers and freight handlers 12. Carpenters and joiners 13. Welders and flame cutters 14. Painters and related workers 15. Papermaking-plant operators 16. Architects, town and traffic planners 17. Wood-processing-plant operators 18. Construction and maintenance labourers: roads, dams and similar constructions 19. Electrical-equipment assemblers 20. Computing professionals not elsewhere classified 21. Technical and commercial sales representatives 22. Plastic-products machine operators 23. Computer systems designers, analysts (and programmers) 24. Tellers and other counter clerks 25. Finance and administration managers
FR 2010Q3	1. Assemblers 2. Personal care and related workers 3. Transport labourers and freight handlers 4. Chemical-processing-plant operators 5. Housekeeping and restaurant services workers 6. Building frame and related trades workers 7. Secretaries and keyboard-operating clerks 8. Production and operations managers 9. Food and related products machine operators 10. Manufacturing labourers 11. Cashiers, tellers and related clerks 12. Electrical and electronic equipment mechanics and fitters 13. Material-recording and transport clerks 14. Motor vehicle drivers 15. Physical and engineering science technicians 16. Other teaching associate professionals 17. Messengers, porters, doorkeepers and related workers 18. Mining and construction labourers 19. Blacksmiths, tool-makers and related trades workers 20. Computing professionals 21. Metal-processing plant operators 22. Sales and services elementary occupations 23. Architects, engineers and related professionals 24. Food processing and related trades workers 25. Machinery mechanics and fitters
GR 2010Q3	1. Field crop and vegetable growers 2. Textile, garment and related trades workers 3. Electrical and electronic equipment mechanics and fitters 4. Other teaching professionals 5. Personal care and related workers 6. Social science and related professionals 7. Metal moulders, welders, sheet-metal workers, structural-metal preparers, and related trades workers 8. Numerical clerks 9. Architects, engineers and related professionals 10. Administrative associate professionals 11. Messengers, porters, doorkeepers and related workers 12. College, university and higher education teaching professionals 13. Painters, building structure cleaners and related trades workers 14. Writers and creative or performing artists 15. Transport labourers and freight handlers 16. Artistic, entertainment and sports associate professionals 17. Health associate professionals (except nursing) 18. Cashiers, tellers and related clerks 19. Domestic and related helpers, cleaners and launderers 20. Power-production and related plant operators 21. Physical and engineering science technicians 22. Agricultural and other mobile plant operators 23. Animal producers and related workers 24. Textile-, fur- and leather-products machine operators 25. Metal-processing plant operators
HU 2010Q3	1. Shop, stall and market salespersons and demonstrators 2. Construction and maintenance labourers: roads, dams and similar constructions 3. Riggers and cable splicers 4. Sweepers and related labourers 5. Welders and flame cutters 6. Waiters, waitresses and bartenders 7. Chemical-products machine operators not elsewhere classified 8. Business professionals not elsewhere classified 9. Painters and related workers 10. Child-care workers 11. Managers of small enterprises in wholesale and retail trade 12. Insurance representatives 13. Motor vehicle mechanics and fitters 14. Floor layers and tile setters 15. Machine-tool operators 16. Electronics mechanics, fitters and servicers 17. Electronic-equipment assemblers 18. Precision-instrument makers and repairers 19. Librarians and related information professionals 20. Special education teaching professionals 21. Textile-, fur- and leather-products machine operators not elsewhere classified 22. Field crop and vegetable growers 23. Bakers, pastry-cooks and confectionery makers 24. Bricklayers and stonemasons 25. Lawyers

# European Vacancy Monitor

Issue no. 2/2011 | March 2011

IE 2010Q3	1. Shop, stall and market salespersons and demonstrators 2. Other specialist managers 3. Primary and pre-primary education teaching professionals 4. Health professionals (except nursing) 5. Building frame and related trades workers 6. Cashiers, tellers and related clerks 7. Assemblers 8. Building finishers and related trades workers 9. Metal moulders, welders, sheet-metal workers, structural-metal preparers, and related trades workers 10. Business professionals 11. Messengers, porters, doorkeepers and related workers 12. Computing professionals 13. Housekeeping and restaurant services workers 14. Finance and sales associate professionals 15. Material-recording and transport clerks 16. Armed forces 17. Chemical-processing-plant operators 18. College, university and higher education teaching professionals 19. Other teaching professionals 20. Building caretakers, window and related cleaners 21. Social science and related professionals 22. Artistic, entertainment and sports associate professionals 23. Physical and engineering science technicians 24. Writers and creative or performing artists 25. Transport labourers and freight handlers
IT 2010Q2	1. Customer services clerks 2. Domestic and related helpers, cleaners and launderers 3. Agricultural, fishery and related labourers 4. Motor vehicle drivers 5. Metal- and mineral-products machine operators 6. Messengers, porters, doorkeepers and related workers 7. Library, mail and related clerks 8. Garbage collectors and related labourers 9. Rubber- and plastic-products machine operators 10. Administrative associate professionals 11. Machinery mechanics and fitters 12. Secretaries and keyboard-operating clerks 13. Building caretakers, window and related cleaners 14. Electrical and electronic equipment mechanics and fitters 15. Building finishers and related trades workers 16. Agricultural and other mobile plant operators 17. Chemical-processing-plant operators 18. Special education teaching associate professionals 19. Chemical-products machine operators 20. Potters, glass-makers and related trades workers 21. Social work associate professionals 22. Other machine operators not elsewhere classified 23. Public service administrative professionals 24. Glass, ceramics and related plant operators 25. Precision workers in metal and related materials
LT 2010Q3	1. Heavy truck and lorry drivers 2. Transport labourers and freight handlers 3. Forestry workers and loggers 4. Bakers, pastrycooks and confectionery makers 5. Welders and flame cutters 6. Agricultural- or industrial-machinery mechanics and fitters 7. Sweepers and related labourers 8. Legal professionals not elsewhere classified 9. Directors and chief executives 10. Builders 11. Cooks 12. Other teaching professionals not elsewhere classified 13. Production and operations managers in transport, storage and communications 14. Business services agents and trade brokers not elsewhere classified 15. Machine-tool setters and setter-operators 16. Building frame and related trades workers not elsewhere classified 17. College, university and higher education teaching professionals 18. Plumbers and pipe fitters 19. Administrative secretaries and related associate professionals 20. Technical and commercial sales representatives 21. Stone splitters, cutters and carvers 22. Veterinarians 23. Car, taxi and van drivers 24. Painters and related workers 25. Other machine operators not elsewhere classified
LU 2010Q3	1. Waiters, waitresses and bartenders 2. Travel attendants and travel stewards 3. Managers of small enterprises of restaurants and hotels 4. Transport labourers and freight handlers 5. Nursing associate professionals 6. Social work associate professionals 7. Secondary education teaching professionals 8. Metal moulders and coremakers 9. Midwifery associate professionals 10. Architects, town and traffic planners 11. Electrical engineers 12. Other office clerks 13. Production and operations managers not elsewhere classified 14. Finance and sales associate professionals not elsewhere classified 15. Gardeners, horticultural and nursery growers 16. Bus and tram drivers 17. Computer systems designers, analysts (and programmers) 18. Philosophers, historians and political scientists 19. Managers of small enterprises not elsewhere classified 20. Pre-primary education teaching professionals 21. Bookkeepers 22. Draughtspersons 23. Other personal services workers not elsewhere classified 24. Primary education teaching associate professionals 25. Dental assistants
LV 2010Q3	1. Manufacturing labourers 2. Shop, stall and market salespersons and demonstrators 3. Housekeeping and restaurant services workers 4. Mining and construction labourers 5. Domestic and related helpers, cleaners and launderers 6. Motor vehicle drivers 7. Building frame and related trades workers 8. Material-recording and transport clerks 9. Primary and pre-primary education teaching professionals 10. Agricultural and other mobile plant operators 11. Production and operations managers 12. Administrative associate professionals 13. Painters, building structure cleaners and related trades workers 14. Cashiers, tellers and related clerks 15. Business services agents and trade brokers 16. Machinery mechanics and fitters 17. Secretaries and keyboard-operating clerks 18. Personal care and related workers 19. Social work associate professionals 20. Food and related products machine operators 21. Textile-, fur- and leather-products machine operators 22. Health professionals (except nursing) 23. Architects, engineers and related professionals 24. Business professionals 25. Writers and creative or performing artists

# European Vacancy Monitor

Issue no. 2/2011 | March 2011

MT 2010Q2	1. Manufacturing labourers 2. Statistical, mathematical and related associate professionals 3. Secretaries 4. Electronic-equipment assemblers 5. Safety, health and quality inspectors 6. Stock clerks 7. Receptionists and information clerks 8. Computer assistants 9. Shop, stall and market salespersons and demonstrators 10. Armed forces 11. Customs, tax and related government associate professionals not elsewhere classified 12. Pharmaceutical-and toiletry-products machine operators 13. College, university and higher education teaching professionals 14. Well drillers and borers and related workers 15. Religious professionals 16. Special education teaching associate professionals 17. Production and operations managers in business services enterprises 18. Secondary education teaching professionals 19. Butchers, fishmongers and related food preparers 20. Nursing associate professionals 21. Economists 22. Architects, engineers and related professionals not elsewhere classified 23. Electronics and telecommunications engineering technicians 24. Accounting and book-keeping clerks 25. Plastic-products machine operators
NL 2010Q2	1. Transport labourers and freight handlers 2. Business services agents and trade brokers not elsewhere classified 3. Bookkeepers 4. Architects, engineers and related professionals not elsewhere classified 5. Elementary occupations 6. Cooks 7. Legal professionals not elsewhere classified 8. Psychologists 9. Agricultural- or industrial-machinery mechanics and fitters 10. Receptionists and information clerks 11. Metal-, rubber- and plastic-products assemblers 12. Production and operations managers in construction 13. Chemical-still and reactor operators (except petroleum and natural gas) 14. Welders and flame cutters 15. Authors, journalists and other writers 16. Travel agency and related clerks 17. Vehicle, window and related cleaners 18. Office clerks 19. Travel consultants and organisers 20. Butchers, fishmongers and related food preparers 21. Production and operations managers in business services enterprises 22. Production clerks 23. Child-care workers 24. Senior officials of special-interest organisations 25. Building caretakers
PL 2010Q2	1. Manufacturing labourers 2. Business professionals not elsewhere classified 3. Other office clerks 4. Heavy truck and lorry drivers 5. Bookkeepers 6. Shop, stall and market salespersons and demonstrators 7. Technical and commercial sales representatives 8. Electrical mechanics fitters and services 9. Electronic-equipment assemblers 10. Construction and maintenance labourers: roads, dams and similar constructions 11. Sewers, embroiderers and related workers 12. Accountants 13. Sweepers and related labourers 14. Receptionists and information clerks 15. Carpenters and joiners 16. Transport clerks 17. Tool-makers and related workers 18. Gardeners, horticultural and nursery growers 19. Insulation workers 20. Plastic-products machine operators 21. Lifting-truck operators 22. Car, taxi and van drivers 23. Waiters, waitresses and bartenders 24. Library and filing clerks 25. Plasterers
PT 2010Q3	1. Housekeeping and restaurant services workers 2. Building finishers and related trades workers 3. Personal care and related workers 4. Metal moulders, welders, sheet-metal workers, structural-metal preparers, and related trades workers 5. Material-recording and transport clerks 6. Building frame and related trades workers 7. Finance and sales associate professionals 8. Optical and electronic equipment operators 9. Agricultural, fishery and related labourers 10. Metal- and mineral-products machine operators 11. Fishery workers, hunters and trappers 12. Cashiers, tellers and related clerks 13. Blacksmiths, tool-makers and related trades workers 14. Business professionals 15. Writers and creative or performing artists 16. Agricultural and other mobile plant operators 17. Painters, building structure cleaners and related trades workers 18. Motor vehicle drivers 19. Wood treaters, cabinet-makers and related trades workers 20. Secondary education teaching professionals 21. Business services agents and trade brokers 22. Armed forces 23. Potters, glass-makers and related trades workers 24. College, university and higher education teaching professionals 25. Mining and mineral-processing-plant operators
RO 2010Q2	1. Painters and related workers 2. Heavy truck and lorry drivers 3. Trade brokers 4. Bricklayers and stonemasons 5. Cashiers and ticket clerks 6. Building caretakers 7. Agricultural- or industrial-machinery mechanics and fitters 8. Power-production plant operators 9. Shoemaking- and related machine operators 10. Protective services workers not elsewhere classified 11. Building frame and related trades workers not elsewhere classified 12. Composers, musicians and singers 13. Crop and animal producers 14. Building and related electricians 15. Street (food) vendors 16. Plumbers and pipe fitters 17. Safety, health and quality inspectors 18. Legal professionals 19. Electrical mechanics fitters and services 20. Computing professionals not elsewhere classified 21. Paperboard, textile and related products assemblers 22. Sewing-machine operators 23. Sewers, embroiderers and related workers 24. Computer equipment operators 25. Electronic-equipment assemblers



# European Vacancy Monitor

Issue no. 2/2011 | March 2011

SE 2010Q3	1. Shop, stall and market salespersons and demonstrators 2. Personal care and related workers 3. Helpers and cleaners in offices, hotels and other establishments 4. Heavy truck and lorry drivers 5. Technical and commercial sales representatives 6. Motor vehicle mechanics and fitters 7. Child-care workers 8. Manufacturing labourers 9. Machine-tool operators 10. Nursing associate professionals 11. Mechanical-machinery assemblers 12. Building frame and related trades workers not elsewhere classified 13. Earth-moving and related plant operators 14. Computer assistants 15. Electrical-equipment assemblers 16. Other machine operators not elsewhere classified 17. Cooks 18. Agricultural- or industrial-machinery mechanics and fitters 19. Computer systems designers, analysts (and programmers) 20. Metal finishing-, plating- and coating-machine operators 21. Transport labourers and freight handlers 22. Personnel and careers professionals 23. Pre-primary education teaching associate professionals 24. Metal melters, casters and rolling-mill operators 25. Administrative secretaries and related associate professionals
SI 2010Q3	1. Shop, stall and market salespersons and demonstrators 2. Manufacturing labourers 3. Machine-tool operators 4. Civil engineering technicians 5. Sales and marketing managers 6. Accountants 7. Agricultural- or industrial-machinery mechanics and fitters 8. Crop and animal producers 9. Electronics and telecommunications engineering technicians 10. Armed forces 11. Employment agents and labour contractors 12. Physical and engineering science technicians not elsewhere classified 13. Meteorologists 14. Directors and chief executives 15. Physiotherapists and related associate professionals 16. Building frame and related trades workers not elsewhere classified 17. Crane, hoist and related plant operators 18. Plastic-products machine operators 19. Stock clerks 20. Building construction labourers 21. Computer assistants 22. Librarians and related information professionals 23. Bakers, pastry-cooks and confectionery makers 24. Research and development managers 25. Industrial robot operators
SK 2010Q3	1. Garbage collectors 2. Assemblers 3. Electronic-equipment assemblers 4. Building construction labourers 5. Doorkeepers, watchpersons and related workers 6. Industrial robot operators 7. Jewellery and precious-metal workers 8. Electrical-equipment assemblers 9. Secondary education teaching professionals 10. Painters and related workers 11. Electrical mechanics fitters and services 12. Helpers and cleaners in offices, hotels and other establishments 13. Welders and flame cutters 14. Computer systems designers, analysts (and programmers) 15. Metal-, rubber- and plastic-products assemblers 16. Transport labourers and freight handlers 17. Mail carriers and sorting clerks 18. Accounting and book-keeping clerks 19. Sewers, embroiderers and related workers 20. Receptionists and information clerks 21. Electronics and telecommunications engineers 22. Pre-primary education teaching professionals 23. Primary education teaching associate professionals 24. Tellers and other counter clerks 25. Industrial robot controllers
UK 2010Q2	1. Shop, stall and market salespersons and demonstrators 2. Transport labourers and freight handlers 3. Door-to-door and telephone salespersons 4. Building construction labourers 5. Motor vehicle mechanics and fitters 6. Decorators and commercial designers 7. Technical and commercial sales representatives 8. Doorkeepers, watchpersons and related workers 9. Secretaries 10. Manufacturing labourers 11. Sales and marketing managers 12. Production and operations managers in manufacturing 13. Home-based personal care workers 14. Plumbers and pipe fitters 15. Child-care workers 16. Welders and flame cutters 17. Numerical clerks 18. Building and related electricians 19. Production and operations managers not elsewhere classified 20. Securities and finance dealers and brokers 21. Carpenters and joiners 22. Machine-tool operators 23. Customer services clerks 24. Data entry operators 25. Computing professionals

## 2. Top 5 new registered job vacancies of PES, per country (inflow 2010Q3)

EU	1. Shop salespersons and demonstrators 2. Technical and commercial sales representatives 3. Hand packers and other manufacturing labourers 4. Heavy truck and lorry drivers 5. Home-based personal care-workers
AT	1. Housekeepers and related workers 2. Waiters, waitresses and bartenders 3. Shop salespersons and demonstrators 4. Freight handlers 5. Hand packers and other manufacturing labourers

BE	1. Shop salespersons and demonstrators 2. Secretaries 3. Assembling labourers 4. Helpers and cleaners in offices, hotels and other establishments 5. Heavy truck and lorry drivers
CZ	1. Fashion and other models 2. Electrical mechanics and fitters 3. Mechanical-machinery operators 4. Technical and commercial sales representatives 5. Heavy truck and lorry drivers

DE	<ol style="list-style-type: none"> <li>1. Hand packers and other manufacturing labourers</li> <li>2. Finance and sales associate professionals not elsewhere classified</li> <li>3. Other office clerks</li> <li>4. Stock clerks</li> <li>5. Shop salespersons and demonstrators</li> </ol>
DK	<ol style="list-style-type: none"> <li>1. Helpers and cleaners in offices, hotels and other establishments</li> <li>2. Institution-based personal care workers</li> <li>3. Door-to-door and telephone salespersons</li> <li>4. Shop salespersons and demonstrators</li> <li>5. Pre-primary education teaching associate professionals</li> </ol>
EE	<ol style="list-style-type: none"> <li>1. Building frame and related trades workers not elsewhere classified</li> <li>2. Sewing-machine operators</li> <li>3. Shop salespersons and demonstrators</li> <li>4. Cooks</li> <li>5. Heavy truck and lorry drivers</li> </ol>
ES	<ol style="list-style-type: none"> <li>1. Field crop and vegetable growers</li> <li>2. Building construction labourers</li> <li>3. Bricklayers and stonemasons</li> <li>4. Construction and maintenance labourers: roads, dams and similar constructions</li> <li>5. Stenographers and typists</li> </ol>
FI	<ol style="list-style-type: none"> <li>1. Finance and sales associate professionals</li> <li>2. Shop salespersons and demonstrators</li> <li>3. Building caretakers, window and related cleaners</li> <li>4. Housekeeping and restaurant services workers</li> <li>5. Institution-based personal care workers</li> </ol>
IR	<ol style="list-style-type: none"> <li>1. Technical and commercial sales representatives</li> <li>2. Other office clerks</li> <li>3. Waiters, waitresses and bartenders</li> <li>4. Cooks</li> <li>5. Domestic helpers and cleaners</li> </ol>
LT	<ol style="list-style-type: none"> <li>1. Forestry labourers</li> <li>2. Prison guards</li> <li>3. Construction and maintenance laborers: roads, dams and similar constructions</li> <li>4. Glaziers</li> <li>5. Other machine operators and assemblers</li> </ol>
LV	<ol style="list-style-type: none"> <li>1. Painters and related workers</li> <li>2. Forestry workers and loggers</li> <li>3. Building construction labourers</li> <li>4. Shop salespersons and demonstrators</li> <li>5. Hand packers and other manufacturing labourers</li> </ol>
PT	<ol style="list-style-type: none"> <li>1. Manufacturing labourers</li> <li>2. Cooks</li> <li>3. Waiters, waitresses and bartenders</li> <li>4. Helpers and cleaners in offices, hotels and other establishments</li> <li>5. Shop salespersons and demonstrators</li> </ol>

SE	<ol style="list-style-type: none"> <li>1. Technical and commercial sales representatives</li> <li>2. Shop salespersons and demonstrators</li> <li>3. Door-to-door and telephone salespersons</li> <li>4. Street food vendors</li> <li>5. Helpers and cleaners in offices, hotels and other establishments</li> </ol>
SI	<ol style="list-style-type: none"> <li>1. Manufacturing labourers</li> <li>2. Stall and market salespersons</li> <li>3. Welders and flame cutters</li> <li>4. Bricklayers and stonemasons</li> <li>5. Heavy truck and lorry drivers</li> </ol>
SK	<ol style="list-style-type: none"> <li>1. Fashion and other models</li> <li>2. Sewers, embroiderers and related workers</li> <li>3. Welders and flame cutters</li> <li>4. Heavy truck and lorry drivers</li> <li>5. Metal wheel-grinders, polishers and tool sharpeners</li> </ol>
UK	<ol style="list-style-type: none"> <li>1. Home-based personal care-workers</li> <li>2. Technical and commercial sales representatives</li> <li>3. Heavy truck and lorry drivers</li> <li>4. Shop salespersons and demonstrators</li> <li>5. Domestic helpers and cleaners</li> </ol>

### 3. TOP 5 of the EURES Job Mobility Portal

According to the data on the EURES Portal on 11th January 2011 (ISCO 3-digit), the Top 5 occupational groups most in demand in Europe are:

1. Finance and sales associate professionals
  2. Shop salespersons and demonstrators
  3. Personal care and related workers
  4. Stall and market salespersons
  5. Modern health associate professionals\* (except nursing)
- \* comprising sanitarians, dieticians and nutritionists, optometrists and opticians, physiotherapists, and etc.

Source: European Job Mobility Bulletin, Issue nr. 2/2011 (March 2011)

# European Vacancy Monitor

Issue no. 2/2011 | March 2011

## ANNEX A1

## ABBREVIATIONS

### *Country abbreviations*

AT	Austria	LV	Latvia
BE	Belgium	LT	Lithuania
BG	Bulgaria	LU	Luxembourg
CY	Cyprus	MT	Malta
CZ	Czech Republic	NL	Netherlands
DK	Denmark	NO	Norway
EE	Estonia	PL	Poland
ES	Spain	PT	Portugal
FI	Finland	RO	Romania
FR	France	SK	Slovakia
DE	Germany	SI	Slovenia
GR	Greece	SE	Sweden
HU	Hungary	CH	Switzerland
IE	Ireland	UK	United Kingdom
IT	Italy		

EJMB	European Job Mobility Bulletin
EVM	European Vacancy Monitor
EURES	EUROpean Employment Services
ISCED	International Standard Classification of Education (1, 2 = primary, lower secondary, 3, 4, 5 = upper, post-secondary, 6 = tertiary education)
ISCO	International Standard Classification of Occupations
NACE	Classification of Economic Activities in the European Community
JVS	Job Vacancy Statistics (EUROSTAT)
LFS	Labour Force Survey (EUROSTAT)
PES	Public Employment Services
Q1	First quarter of the year
TAW	Temporary Agency Work/er
TWA	Temporary Work Agency

## ANNEX A2 DEFINITIONS AND CONCEPTS

### *Job vacancy (EC definition)*

The official definition of a job vacancy is included in Article 2 of (EC) Regulation 453/2008 and is used by EUROSTAT. A job vacancy shall mean a paid post that is newly created, unoccupied, or about to become vacant: a) for which the employer is taking active steps and is prepared to take further steps to find a suitable candidate from outside the enterprise concerned, and b) which the employer intends to fill either immediately or within a specific period of time. This is a 'stock' number (see below).

### *Job-finders*

Job-finders are people who are employed in a 'reference week' of that quarter and have started their job in a month, or, at most, three months earlier than the month of the 'reference week'. The number of job-finders is calculated quarterly using the EU Labour Force Survey supplied by Eurostat.

### *Stock numbers, inflows and outflows*

A 'stock' number is a statistical term measuring a variable at a certain moment in time, for example, the number of job vacancies available in Germany at 1 January 2011. A 'flow' number is measured over a period of time. For example, the 'inflow' is the number of new vacancies in the first half year of January. Obviously, this number is always higher than the stock number, because some vacancies are immediately filled and others are withdrawn.

### *Job vacancy rate*

The Job Vacancy Rate ('JVR') is the proportion of total posts that are vacant: the number of job vacancies divided by the number of occupied posts plus the number of job vacancies. For these purposes, 'employment' only refers to the employees on the payroll, excluding the self-employed. This is a 'stock' figure. The 'JVR' is often used to contrast with the unemployment rate, showing the inverse relation between job vacancies and unemployment.

### *Job-finder rate*

The job-finder rate (JFR) is the number of job-finders compared to employment (the number of employed people). The job-finder rate is a proxy for the vacancy mobility rate.

### *Vacancy mobility rate*

The job vacancy mobility (VMR) is the ratio between the number of filled job vacancies and employment (number of employees). The number of job-finders is used as a proxy for the number of filled job vacancies. This indicator reflects the dynamics at the demand side of the labour market.

### *Job vacancy duration*

The job vacancy duration is the period during which a vacancy is open. As the counterpart of the period of unemployment, the vacancy duration is important in the analysis of the labour market. The vacancy duration can be calculated on the basis of the ratio between the stock and the flows of vacancies, and vice versa.

### *Job vacancy range or market range*

The job vacancy range or market range of a recruitment channel (for example the PES) is the number of job vacancies that have been reported in this channel, set off against the total number of job vacancies in the total labour market. This can be stock, inflow or outflow information.

### *Job vacancy share or market share*

The job vacancy share or market share of a recruitment channel (for example a PES) is the number of job vacancies that have been filled by the specific channel, set off against the total number of filled job vacancies in the labour market. By definition, this is outflow information.

### *ISCO - International Standard Classification of Occupations*

The International Standard Classification of Occupations (ISCO) allows the set of duties and tasks performed by one person at his workplace to be grouped into occupational groups. A 1-digit code indicated a Major Group, which is further defined into subheadings through the use of a 2 and then 3-digit code. The occupation itself has a 4-digit code.