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SPECIAL REPORT

**PENSIONS**

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# Falling short





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**People in rich countries are living longer. Without big reforms they will not be able to retire in comfort, says Philip Coggan**

WHEN GERTRUDE JANEWAY died in 2003, she was still getting a monthly cheque for \$70 from the Veterans Administration—for a military pension earned by her late husband, John, on the Union side of the American civil war that ended in 1865. The pair had married in 1927, when he was 81 and she was 18. The amount may have been modest but the entitlement spanned three centuries, illustrating just how long pension commitments can last.

A pension promise can be easy to make but expensive to keep. The employers who promised higher pensions in the past knew they would not be in their posts when the bill became due. That made it tempting for them to offer higher pensions rather than better pay. Over the past 15 years the economics of the deal have become clear, initially in the private sector, where pensions (and health-care costs after retirement) were central to the bankruptcy of General Motors and many other firms.

There are big national differences, but in most developed countries the bulk of retirement income (around 60%, according to the OECD) comes from the state. Most countries offer some kind of basic safety net for those who have no other income. In addition to this, they may have a social-insurance scheme to which workers and employers contribute. Despite the insurance label, these are essentially pay-as-you-go (PAYG) systems in which benefits are paid out of current taxes.

In some countries workers also have pension rights that are linked to their employment, whether it is in the public or the private sector. Such schemes can be funded (as in America, Britain and the Netherlands) or unfunded (as in much of Europe). In some cases the state has required such schemes to cover all employees. Australia, for instance, has turned itself into the world's fourth-largest market for fund management by setting up a compulsory national pension scheme for its 22m people. On top of that, people accumulate savings (sometimes called pensions and sometimes not) that they expect to draw on during their declining years.

## The four challenges

Pension provision is higgledy-piggledy and often complex, but most rich countries are having to deal with four main underlying problems. This special report will analyse these in detail and suggest ways of tackling them. The first is that people are living longer, but they are retiring earlier than they were 40 years ago. A higher proportion of their lives is thus spent in retirement. Second, the large generation of baby-boomers (in America, those born between 1946 and 1964) is now retiring. But the following generations are smaller, leaving the children of the boomers with a huge cost burden.



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# Pensions overview

## Key terms

### Support ratio:

The number of people of working age compared with the number of people beyond retirement age.

### Participation rate:

The proportion of the population that is in the labour force.

### Defined benefit:

A pension linked to the employee's salary where the risk falls on the employer.

### Defined contribution:

A pension dependent on the amount contributed, and the investment performance, where the risk falls mainly on the employee.

Sources: J.P. Morgan; Guinness World Records; Human Mortality Database; OECD; US Social Security Administration; Towers Watson



## Total pension assets, 13 major pension markets, 2010



The most siblings to reach pension age, 7 sons and daughters born to Eugene and Alice Theriault in Canada between 1920 and 1941. They were all claiming a government pension in 2007, with their ages ranging from 66 to 87.

Third, some employees have been promised pensions linked to their salaries, known as defined-benefit (DB) schemes. In the 1980s and 1990s the true cost of these promises was hidden by a long bull market in equities. But the past dismal decade for stockmarkets depleted those funds and left employers on the hook for the shortfall. Private-sector employers have largely stopped making such promises to new employees; the public sector is beginning to face the same issues, particularly in Britain and America.

Fourth, private-sector employers are now providing pensions in which the payouts are linked to the investment performance of the funds concerned. These defined-contribution (DC) schemes transfer nearly all the risk to the employees. In theory, they can provide an adequate retirement income as long as enough money is paid in, but employees and employers are contributing too little. Both sorts of funded schemes, DB and DC, essentially face the same problem. "The aggregate amount of pension savings is inadequate," says Roger Urwin of Towers Watson, a consultancy.

Estimating the cost of pension provision has proved enormously difficult. People have consistently lived longer than the actuaries have expected. In 1956 a 60-year-old woman retiring from a job in Britain's National Health Service had a life expectancy of just under 20 years; by 2010 she could expect to live for another 32 years.

Paying a pension for longer is much more expensive, particularly if the payout is linked to inflation. *The Economist* asked MetLife, an insurance company, to calculate what a couple in America would have to spend on an annuity paying out the maximum level of Social Security benefit (the state pension) at age 66: \$4,692 a month now and rising in line with inflation. The answer is almost \$1.2m.

Politicians tend to underestimate the cost of financing PAYG systems. It is tempting to look simply at the ratio of cash benefits to contributions, rather than allowing for the value of the promises being made to future pensioners. But even on a cash basis, pension finances are deteriorating. In 2010 America's Social Security system ran a cash deficit for the first time since 1983 as more money was paid out in benefits than was collected in contributions. This happened about six years earlier than expected, thanks to unusually high unemployment.

The immediate cash cost is only part of the problem; the longer-term calculation also involves the value of future pension promises. In bearing that burden, the key figure is the ratio of workers to pensioners, known as the support (or dependency) ratio. This is deteriorating steadily in all rich countries (see chart). As a result, the tax burden is set to rise, at a time when many countries are still struggling to cope with the fiscal deficits left over from the financial crisis.

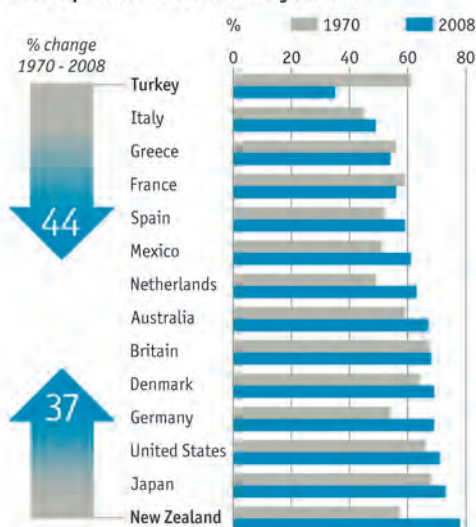
Pensions paid through a funded scheme do not necessarily work better. Many American states and cities have been underfunding the pension schemes for their employees for years, gambling on the stockmarkets to bail them out. That gamble has failed, and now taxpayers are expected to come to the rescue. Either taxes must rise or benefits must be cut.

## A cut by another name

The most obvious "cut" is for people to work longer so that pensions are paid over a smaller proportion of their lifetime. In many countries reform attempts have accordingly concentrated on raising the minimum retirement age or increasing the number of years for which an employee has to contribute before qualifying for full benefits. In France a move to raise the minimum retirement age to 62 was accompanied by a phased increase in the



## Participation rates of 50-64-year-olds



## Retirement age

Male	Official 2010	Actual 2004-09
Turkey	60	62.8
Italy	65	61.1
Greece	65	61.9
France	60	59.1
Spain	65	61.8
Mexico	65	72.2
Netherlands	65	62.1
Australia	65	64.8
Britain	65	64.3
Denmark	65	64.4
Germany	65	61.8
United States	66	65.5
Japan	65	69.7
New Zealand	65	67.1

Sir Winston Churchill became prime minister at

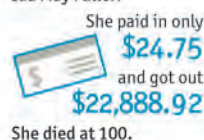


## Defined-benefit pension holders

American private-sector workers\* with no other plan type



The first American to receive a monthly Social Security cheque was Ida May Fuller.



## Life expectancy at 65, male, years



► minimum level of contributions from 40.5 to 41.5 years, a change that was duly attacked by left-wing commentators as being unfair to unemployed workers, part-timers and students entering the job market late. Italy has gone one stage further: from 2015 on, future changes in the retirement age will be indexed to the rise in life expectancy.

Sweden, Germany and Japan already have an automatic balancing system to deal with deteriorating pension finances, largely by making the inflation-linking of benefits less generous. The Netherlands, which has the best-funded (and widely admired) DB pension system in the world, also limits inflation-linking, but delivers pensions that are very close to average earnings. Research by Towers Watson shows that it has a higher ratio of pension assets to GDP than any other country—and it benefits from economies of scale, with pension provision dominated by the giant ABP and PGGM funds. However, contributions are high and the rules on solvency are extremely strict, requiring liabilities to be more than 100% funded.

Pension promises involve a transfer from one generation to another, even when one of those generations is too young to vote. That is true even when schemes are funded, and the money invested in equities and bonds; future workers will have to generate the income needed to pay the dividends on those shares and the interest on that debt.

That is turning pensions into a battleground, pitting young against old and taxpayers against pensioners. The fiscal crisis has exacerbated the fight. Pension promises made by the govern-

ment (either to all citizens or to public-sector workers) do not show up in the debt-to-GDP ratios that are used to analyse state finances. Adding them in makes the position look even more alarming. On conservative accounting assumptions, the combined pension deficits of the American states are equal to a quarter of the gross federal debt.

The problem is particularly acute at the level of America's states because so many of them have balanced-budget amendments. When pension shortfalls require higher contributions, the money must be found from somewhere: higher taxes, less spending on other services or higher contributions from workers (amounting to a pay cut). A further difficulty is that pension rights have been deemed to be legally (and in some cases constitutionally) protected—though some Republican governors have tried to cut unions' bargaining rights.

Private-sector workers may be aggrieved at having to fund the generous pensions of their public-sector counterparts through their taxes. But unions are strongest in the public sector and will fight hard. Nobody seriously disputes that employees should keep the pension rights they have accrued so far, although they may receive the benefits later; the battle is over whether employees should be allowed to keep accruing the same perks in the future.

Britain's coalition government is desperately trying to cut its deficit, so a rise in pension costs is particularly inopportune; as it is, the gap between public-sector pension benefits paid and contributions received is expected to widen from £4 billion in 2010-11 to £10.3 billion by 2015-16. A recent government-commissioned report into the cost of public-sector schemes by Lord Hutton, a former Labour minister, proposed a number of changes, including a later retirement age, higher employee contributions and a pension based on the employee's career-average, rather than final, salary.

Since pensions are a form of deferred pay, workers view such reforms as a pay cut, albeit to pension rights they have not yet accrued. There is room for debate about whether such cuts are fair. But in some countries the raid on pensioners' assets has been rather more brazen. Hungary, for instance, set up a mandatory pension system in 1998 to supplement the state scheme, with contributions deducted from wages and invested in a private



**THE KEY FIGURE IS THE RATIO OF WORKERS TO PENSIONERS, KNOWN AS THE SUPPORT RATIO. THIS IS DETERIORATING STEADILY IN ALL RICH COUNTRIES**

fund. By 2010 the fund had amassed nearly \$14 billion of assets, but the cash-strapped government has in effect nationalised it by imposing stiff financial penalties on workers who want to remain in the private sector. Argentina, for its part, seized private-sector pension assets in 2008.

If all the burden is not to fall on the state, workers need to save more during their lifetimes. That may require a change in at ►►

## Too much, too young

Watch your wallets: the baby-boomers are beginning to retire

WHEN MOST LABOUR was agricultural, people generally toiled in the fields until they dropped. The idea of formal retirement did not become feasible until work moved from farms to factories. In 1889 Otto von Bismarck famously introduced the world's first (modest) pension scheme in Germany. In the 20th century, when universal suffrage became widespread, a period of retirement after work was seen as a mark of a civilised social democracy.

After the second world war pension provision increased markedly, but the number of elderly people was still quite small (see chart, previous page). In the 1970s and 1980s caring for them seemed easily affordable. Many countries even reduced their retirement ages.

The demographic picture looks different now that the baby-boomers are starting to retire. In 1950 there were 7.2 people aged 20–64 for every person of 65 and more in the OECD. By 1980 the ratio had dropped to 5.1. Now it is around 4.1, and by 2050 it will be just 2.1. In short, every couple will be supporting a pensioner.

Europe and Japan are facing the biggest problems. The average dependency ratio in the European Union is already down to 3.5, and is heading for 1.8 by 2050. In Italy it is forecast to be nearly 1.5 and in Germany nearly 1.6 by then. Japan is on track for a startling 1.2. Since the average pensioner currently draws a total of about 60% of median earnings, from government and private sources, the system is likely to become unaffordable. In a sense, it does not matter how the benefits are paid for. If they are unfunded, they come from workers' taxes; if funded, they come from investment income. But the income has to be generated by someone.

There are ways of reducing the burden. The current generation of workers could save more now. If they put more money into funded pension schemes, the extra saving might encourage more investment and thus boost economic growth. A wealthier society would find it easier to afford paying pensions. Countries with PAYG schemes could raise taxes now, reducing the deficit and thus the debt burden on the younger generations.

### We want it now

But more savings or higher taxation now would require those currently at work to defer consumption. They may not be willing to do so. And given the weakness of developed economies in the wake of the financial crisis, governments may not want to see consumption go down in the immediate future.

In the OECD public spending on pensions benefits has been growing faster than national output, rising from 6.1% of GDP in 1990 to 7% in 2007. It is forecast to reach 11.4% of GDP by 2050. Those forecasts already take into account the planned rise in retirement ages and a likely drop in replacement ratios and thus assume that voters will approve of pension reform even as the baby-boomers become a potentially powerful voting block of retired people.

But that assumption may not be safe. Turnout in elections tends to be higher among the elderly than among the young. As Neil Howe and Richard Jackson of the Centre for Strategic and International Studies in Washington, DC, have written: "In the 2020s young people in developed countries will have the future on their side. Elders will have the votes on theirs."

not have to be close to 100% because generally pensioners need less to live on than full-time workers. They avoid the expenses associated with work and dependent children, have mostly paid off the mortgage on their house and no longer need to save for their retirement.

But the ratio often falls short of expectations. The OECD reckons that the average worker in its member countries currently gets a state pension of around 42% of his average earnings. If state benefits are cut, more of the burden will fall on private provision. A recent survey by Aviva suggested that European workers are hoping for a replacement ratio in the region of 70% but are likely to get only 35–55%, depending on the country.

The replacement ratio needs to be higher than average for the least well paid, who spend proportionately more on essentials such as food, fuel and shelter. The OECD reckons that the net replacement ratio (allowing for the effect of taxes) for the poorest workers, on half mean earnings, averages just under 83%, but there are big national differences; in Denmark, Greece and the Netherlands it is more than 100%, but in Germany, Mexico and Japan it is under 60%.

So despite the need for cutting costs, governments need to ensure that their elderly citizens have enough money to maintain a decent standard of living. In the majority of countries poverty rates among the elderly are higher than those in the general population. Women are in a worse position than men: they live longer, typically earn less and spend a shorter time in the workforce. If they are married, their pension entitlements often depend on their husbands' earnings.

Japan, which started greying earlier than other developed economies, can be viewed as an ominous precedent. Its only advantage in the pensions battle has been that its workers tend to retire later than those in other countries—around a decade after those in France. Nevertheless, the ageing of its population over the past 20 years has been accompanied by deflationary pressures, sluggish economic growth and moribund asset markets.

Public spending on pensions has risen by more than 80%. In the corporate sector lax accounting standards disguised the true cost of providing pensions. When the standards were changed, the true horror was revealed: in 2003 the average plan was just 42% funded, so the government had to take over the liabilities of many companies. Even after this rescue, Japan Airlines had to slash pensions by 30% as part of a restructuring plan—a huge blow to pensioners' standard of living.

Where Japan has led, other ageing economies may follow. This special report will focus on rich countries, where most of the problems arise. The details may differ but the impact of the baby-boomers shows up everywhere; their pensions will be a huge burden on coming generations. ■

▶ titude. The old system was distinctly paternalist: either the employer or the government would provide. In America and Britain the switch from DB to DC schemes in the private sector has left the responsibility with the individual worker, but employees have yet to rise to the challenge. They are not putting enough money in, and inevitably will not get enough out. British pensioners with DC plans have accumulated an average pension pot of only £27,000, according to Aviva, an insurance company—enough to buy a pension of just £2,000 a year, with no inflation protection. That will not go far to supplement Britain's meagre state pension.

Whether or not people can expect a comfortable retirement depends on the replacement ratio—the proportion of their lifetime average earnings that their pension will pay out. This does





## WORKING LONGER

## Hiring grandpa

### All hands on deck

WHEN WINSTON CHURCHILL reached the age of 65, his career was still regarded as a bit of a failure. Had he retired then, as most modern 65-year-olds would, he would never have become prime minister, made the speeches for which he has become famous or topped polls of the greatest Britons ever. Is the rich world ignoring the potential of its older workers whose finest hours could still be ahead of them?

As things stand, the absolute number of people of working age in the developed world is set to fall. In the EU it is likely to drop from 305m in 2010 to 286m in 2030 and just 255m in 2050. Over the same period the number of those aged over 65 in those countries will rise from 87m to 142m.

Economic growth is a function of the size of the workforce, the amount of capital employed and the rise in productivity. If the workforce shrinks, as demography shows it will, all the growth will have to come from capital investment and productivity improvements. In Japan, where the working population is already getting smaller, economic growth has been minuscule, de-

spite a good productivity record. To counteract a shrinking labour force, the retirement age needs to be raised. Around half the countries in the OECD have already acted on this or are planning to do so. In America the age at which full Social Security benefits can be claimed was recently raised to 66 and is due to go up to 67 in 2026.

Working longer has two obvious economic benefits: it boosts output and reduces the length of time for which pensions need to be paid. But governments are barely managing to keep pace with increasing longevity. Between 1960 and 2010 life expectancy at 65 in OECD countries rose by around four years for men and more than five for women.

By 2050 the average official retirement age in the OECD is set to reach around 65, an increase of about 1.6 years for men and 2.5 years for women on today's figure. But over the same period life expectancy at 65 is expected to grow by around three years for men and three-and-a-half for women. So governments are not gaining any ground.

Changing the official retirement age is only the start. In some countries most people actually retire much earlier. In Luxembourg the official pension age is 65 but men on average leave the workforce at 57.

The actual retirement age in OECD countries fell sharply in the second half of the 20th century. In five European countries it is still below 60 for men and in 11 for women. In America more than half of all workers stop at 62, the age at which they can start drawing Social Security, albeit at a reduced rate. By contrast, the average Japanese man works until he is almost 70. Even then he ►►



► will still have 15 years of retirement ahead of him. A 70-year-old Japanese woman has a life expectancy of 19 years.

Raising the official retirement age is not much use if people simply draw unemployment or sickness benefit instead of a pension. But fewer jobs now require a big physical effort, and older people's health has generally improved; in the 20 years to 2004 the proportion of Americans over 65 unable to function independently with ease fell from 26% to 19%.

Participation rates for older workers vary widely between countries (see chart in the introduction to this report). In some countries they have gone down, most notably in Turkey, where for a long time just 25 years of contributions entitled a worker to a full pension. But some countries have also managed to push up their rates. In New Zealand, which increased its official pension age from 60 to 65 over a nine-year period, the employment rate of 60-64-year-olds duly rose from 24% in 1992 to 66% in 2009.

A potential barrier to older people staying on in the workforce is the "lump-of-labour fallacy"—the belief that there is only so much work to go around. In the old days this was used by men to argue against women joining the workforce, and it is still cited by those opposed to immigration today. But it seems obvious that it is better for the economy if a 60-year-old does a productive job than if he is sitting idle, supported by the taxpayer. And the data clearly disprove the fallacy. In Europe the participation rates of those aged 20-25 and 55-59 respectively are positively correlated; in other words, if more older people are working, the chances are that younger people will be too.

As Alicia Munnell and Steven Sass point out in their book, "Working Longer", the trend for American men to retire early started to reverse after 1990. That may have been for a variety of reasons: the shift from manufacturing work that often involved heavy manual labour to a service-based economy; a more highly educated workforce (brainpower declines more slowly than physical ability); and women's recent tendency to return to work when their children have left home.

Shifts in pension provision in themselves can make people want to work longer. Most defined-benefit schemes have either a set retirement age or a mandatory number of contribution years before a full pension can be drawn. Once those conditions have been met, there is little financial incentive to keep working. But in a defined-contribution scheme another year of work probably means a better pension. Surveys suggest that people in DC plans retire a year or two later than those in DB schemes.

But even if people in their 60s want to keep working to improve their pensions, will employers want to hire them or keep them on? A study by America's AARP (formerly the Ameri-

can Association of Retired Persons) in 2002 found that two-thirds of older workers had witnessed or experienced discrimination on age grounds. One problem is perceived productivity. Ms Munnell and Mr Sass cite a study of human-resources professionals indicating that older employees were valued for their loyalty and reliability but less highly rated in terms of flexibility, showing initiative and understanding technology.

The shift to DC pensions might help change employers' attitudes as well. Older workers have traditionally earned more, reflecting the weight of seniority in pay scales, so the cost of providing final-salary pension benefits for them has been higher. Christine Mahoney of Mercer Consulting reckons that the cost of funding a 60-year-old employee in a DB scheme is 12% of payroll, whereas in a DC plan it is just 6%. In America, where employers are expected to provide health care, older workers are also more expensive to insure. On the other hand such workers may be more flexible on pay, particularly if employers are willing to offer part-time work, which many older people prefer. That might make them more attractive to hire.

In the long run, employers will probably change their recruitment practices. Because of demographic factors, workers in their 20s and 30s will simply not be around in the same numbers as before, so the market for them will become much more competitive. Some jobs may be outsourced to developing countries but there will be plenty, particularly in the services sector, that cannot be. Unless a greater number of older workers stays in the labour force, wages are likely to be bid up sharply.

B&Q, a British DIY retailer, has been recruiting older workers since the 1980s, after a pilot project showed that having more of them around improved customer services and sales and reduced staff turnover and absenteeism. Perhaps some day employers will be giving 65-year-olds a gold watch when they join the company. ■

#### DEFINED-CONTRIBUTION PLANS

## Over to you

### Workers need to fend for themselves

THE RICH WILL always have a comfortable retirement; the poor will be supported by the state. For the people in the middle, the best hope of a decent pension has traditionally been to find a job that offered a final-salary pension and then stick around for the rest of their careers.

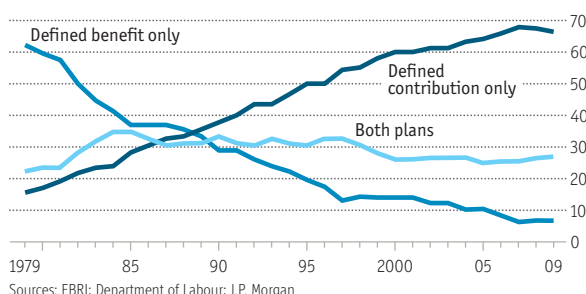
For private-sector workers, such jobs have become a rarity. "Defined-benefit plans are going the way of the dodo," says Olivia Mitchell of the Wharton Business School in Philadelphia. Over the past ten years global assets in DB plans have grown by just 2.9% a year, whereas those in defined-contribution plans have increased by 7.5%, according to a Towers Watson study. Between 1979 and 2009 the share of employees in DB pension plans in America fell from 62% to 7% of the total (see chart, next page), according to the Employee Benefit Research Institute (EBRI), whereas those in DC plans rose from 16% to 67% (the rest had a bit of both). Assets in American DC schemes, also known as 401(k) plans after the subsection of the tax code that created them, were worth \$2.8 trillion at the end of 2009.

With a DC pension, nearly all the risk is passed to the employees. James Poterba at the Massachusetts Institute of Technol- ►►



## So long, DB

America's retirement plans by type, % of total  
Private sector, active participants



ogy, points out that a DC plan forces them to make a set of decisions, such as their contribution rate and their asset allocation, for which they may not be equipped. "A very large proportion of the population has no interest, knowledge or time to direct their 401(k) plans. They are known as the unengaged majority," says Kristi Mitchem of State Street Global Advisors, a custody and fund-management firm.

The danger is that employees will underestimate the size of the pension pot they need and overestimate the investment returns they will achieve. The cost of providing pensions has risen over the past decade; investment returns have been poor and interest rates have fallen. Lower interest rates are important because pension providers are, explicitly or implicitly, buying annuities (guaranteed lifetime incomes) for their clients. A report by Charles Cowling for Politeia, a think-tank, found that last year it cost £25.50 to buy a British annuity that paid £1-worth of pension a year. In 1990 it could have been bought for £12.70.

Logically, therefore, employees should be contributing more to their pension pots. But in the shift from DB to DC the reverse has happened. Employers contribute around 20-25% of payroll to DB plans. The combined total of contributions (by employers and employees) to DC plans in America and Britain is around 9-10%. The amount put into a plan largely determines the resulting pension, so the current level of DC contributions will not deliver anything like the old final-salary pensions. The average account balance in American DC plans at the end of 2009, according to the EBRI, was just \$58,351. But that may sound gloomier than it is, because the median age of DC plan members is only 45, with many years to go to retirement; and some may have other sources of retirement income, such as DB schemes.

Another way to get at the numbers is to look at employees who were consistent members of DC schemes over a period of ten years. The EBRI puts the average balance of such people at \$131,438 in 2009, up from \$67,420 in 1999, which amounts to a compound growth rate of 7%. That would suggest that the growth in balances has largely been driven by contributions. Even employees in their 60s who had been members of DC plans for 30 years had accumulated pots of less than \$200,000, enough to generate a sustainable income of perhaps \$10,000 a year. That is not a huge reward for 30 years of thrift. Seth Masters, chief investment officer of Alliance Bernstein, puts the numbers in perspective: "If our industry is to be successful [in generating a decent pension], people have to be retiring with pots of \$750,000 to \$1 million."

The figures look even worse given that members of DC

plans tend to be among the better-paid. A 2007 paper for the National Bureau of Economic Research found that among families with earnings above \$100,000, over 87% were eligible for a 401(k) plan; among those earning less than \$25,000, under 36% were.

Even if contribution levels improve, the results of DC plans will be highly variable because they depend on the investment performance. That means two workers with identical career paths and salaries could end up with very different pensions.

The choice of funds within the pension plan is therefore extremely important. After the collapse of Enron, an American energy company, it turned out that many of its workers had invested their pensions in company shares. They lost everything.

## Pot luck

To avoid such problems, most employers offer a diversified plan. In Britain the portfolio which employees are allocated if they do not make their own selection will have a mixture of equities, government bonds and other assets, and will be structured in such a way as to become less risky over time as employees near retirement. This reflects the fact that most Britons use their pension pot to buy an annuity.

In America the fastest-growing part of the market is target-date funds, which build a savings pot matched to the employee's chosen retirement date by investing in a range of assets. The EBRI says that in 2009 some 77% of all DC plans offered such funds; of those employees who had the option, some 46% took it. This is a huge business for the three fund-management companies that dominate the sector, Fidelity, T. Rowe Price and Vanguard.

In America very few retired people buy an annuity. They can wait until they reach the age of 70 and six months before they even have to turn their pension pot into income; then they get it by selling part of the fund each year. Target-date fund managers therefore regard themselves as selling a product that runs "through" rather than "to" retirement. Managers say that this justifies more exposure to equities since investors need some protection against inflation.

But this higher equity exposure comes at a price. In 2008 funds with a 2010 target suffered losses of 20-30% as the stock-market plunged. Critics think this shows the danger of steering employees towards equities. "Defaulting people into target-date

*THE DANGER IS THAT EMPLOYEES WILL UNDERESTIMATE THE SIZE OF THE PENSION POT THEY NEED AND OVERESTIMATE THE INVESTMENT RETURNS THEY WILL ACHIEVE*

funds is a violation of the employer's fiduciary responsibility," says Lawrence Kotlikoff at Boston University. "Stocks are not safer in the long run. Their variability just gets bigger."

Derek Young, the chief investment officer at Fidelity's target range, argues that investors should take the long view. Continuing exposure to equities allowed Fidelity's 2010 fund to rebound with the market; since its launch in 1996 the fund has delivered annual returns of 6.8% after fees. Research by Vanguard shows that only 2.5% of target-date holders sold out of their funds (and thus realised their losses) in 2008. Target-date funds may be better than the alternatives, since otherwise investors may take too much or too little risk. As target-date funds became more popular, the share of DC plans invested in the employer's stock fell from 19% in 1999 to 9% in 2009. But even a well-diversified portfolio will not help if too little is invested in it. ■





BEHAVIOURAL ECONOMICS

# A nudge and a wink

## How to persuade employees to provide for their old age

ALBERT EINSTEIN IS said to have described compound interest as the eighth wonder of the world. It should also be a boon for workers planning their retirement. Start saving early enough and a pension becomes much more affordable.

Unfortunately young people are often unable or unwilling to take advantage of this miracle. Their wages are low and their main priority may be to pay off their student debts or to save for a deposit on a house. Moreover, they may find it difficult to defer gratification or, as economists like to put it, they use hyperbolic discounting. Most of them would much rather have money in their hands today than put it aside for a retirement which they can barely imagine. "People worry about sacrificing their liquidity by putting money in a pension," says Alex Waite of Lane Clark & Peacock, a benefits consultancy. "They may have money to save now but think they might need it next year."

But people may change their behaviour if the problem is explained to them in the right way. In one academic study college-age students who were shown digitised pictures of themselves as they might look in old age allocated more than twice as much of their income to retirement savings as students who were shown contemporary photos.

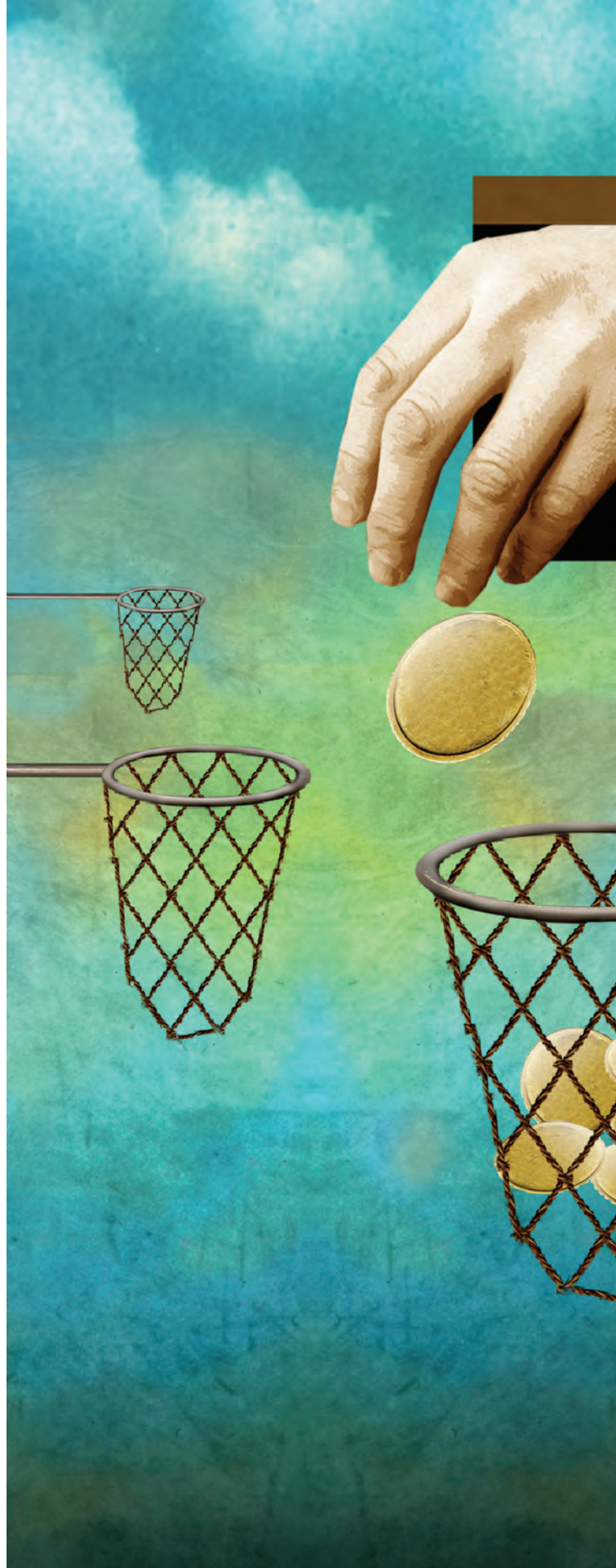
Most countries use some form of tax incentive to encourage saving for pensions, usually by making contributions tax-deductible and allowing pension pots to accumulate tax-free. In a survey by the Investment Company Institute, more than 80% of pension-plan members said that the tax break acted as an incentive, and 40% said that without the 401(k) concessions they would not be saving at all. But tax incentives are likely to be of most benefit to the rich, who have more money to save; and those on lower earnings may find the tax rules too complicated. A survey of British savers by Aegon, an insurance company, found that few understood the concept of tax relief. It concluded that participation in pension plans would increase if the government were described as "matching" the amount of money put aside by workers.

## The easy option

These days the pensions industry is calling on the wiles of the behavioural school of economics. Governments are trying to "nudge" people into doing what is good for them, as described in the eponymous book by two economists, Richard Thaler and Cass Sunstein.

The most popular nudge to do with pensions is auto-enrolment, which takes advantage of people's inertia. Traditionally, workers have been offered the chance to opt in to a pension scheme; this involved filling in a form and making a number of difficult decisions. Many could not be bothered. Under the nudge principle, workers are automatically enrolled in the scheme and actively have to opt out if they do not want to join. This has duly boosted participation.

In America auto-enrolment was approved in the Pension Protection Act of 2006 and was used by 57% of private-sector companies in 2010, with a further 15% planning to introduce it this year, according to a survey by Aon Hewitt, a consultancy. David John of the Brookings Institution suggests that the concept could be extended to small employers via an auto-IRA (individ-



► ual retirement account), allowing businesses to offer employees a pension scheme at low cost.

In Britain auto-enrolment is at the heart of a new national pension scheme, the National Employment Savings Trust (NEST). Due to start in 2012, it is designed to deal with the 45% of workers without a private pension plan. In future all employers will have to offer one, and NEST offers them a low-cost option if they do not want to set up their own scheme. Economies of scale and limited investment choice will keep down charges.

The man behind NEST is Tim Jones, a former retail banker. He sees it as a technological and administrative challenge as much as an investment one. "Our aim is that if you can shop online at Sainsbury's, you can set up an account with NEST," he says. The new rules may persuade perhaps 5m-9m Britons to

save for the first time, he reckons. The number that join NEST could range anywhere from 2m-6m.

However, auto-enrolment raises questions. Saving for a pension may not always be the best use of an employee's income. People with credit-card debts who are paying interest of 15-20%

would be better off reducing their balances. In some countries (including Britain) means-tested benefits for low earners may be reduced in retirement if a pension is being paid.

Another problem is that the amount of money going into NEST may not be enough to generate a decent pension. Total contributions will be 8%, of which 3% will come from the employer, 4% from the employee and 1% from the government, in the form of tax relief. But that is less than the average contribution rate of private-sector DC schemes. The danger is that employers will be tempted to "trade down" to the new levels.

"It has been relatively rare for companies not to slash their contributions when they move from DB to DC," says Alan Morahan at Punter Southall, a consultancy. "There is a danger that auto-enrolment may exacerbate the trend as companies realise they have to make contributions for more people."

Moreover, the new system is being phased in very slowly, with contributions reaching their full level only in 2017, so employees now in their 50s will not get much out of it.

Edward Whitehouse, a pensions expert at the OECD, thinks that more time is needed to demonstrate that auto-enrolment actually works; the initial studies were based on just a small number of American companies. The success of New Zealand's Kiwi-Saver programme, which used auto-enrolment to boost participation, may have been due to the generous tax incentives being offered. In particular, Mr Whitehouse wonders what will happen when workers discover they can get a short-term pay rise by opting out of the system.

In America's corporate sector auto-enrolment is sometimes accompanied by auto-escalation. As workers earn more, their pension contribution goes up steadily. The hope is that they will barely notice the difference in take-home pay but that a higher contribution rate (perhaps 10-15% in total) will in due course allow them to earn a decent pension.

### Make them pay

The alternative to auto-enrolment is compulsion, as practised in Australia since 1992. Employers there are required to contribute 9% (set to rise to 12% in 2019) of an employee's salary to a superannuation account. The system applies to all Australian workers except the very lowest-paid.



*SAVING FOR A PENSION MAY NOT BE THE BEST USE OF AN EMPLOYEE'S INCOME. PEOPLE WITH CREDIT-CARD DEBTS WOULD BE BETTER OFF REDUCING THEIR BALANCES*



► A report by the Brookings Institution found that about half the assets in the Australian scheme were held in self-managed or retail funds, which pushed up charges to an average of around 1.25% of assets. Members of the scheme are able to take all their benefits as a lump sum at age 55. There is no requirement to buy an annuity. Many people use the money to pay off their debts; some go on a spending spree. So they may eat up their savings and have to fall back on the state's means-tested benefit at 65.

In theory, being able to withdraw money from a pension scheme may persuade employees to contribute to it in the first place. But South Africa also offers access to pension savings, and research by Alexander Forbes, a consultancy, found that 70% of members were taking their benefits in cash before retirement. Ideally savers will not take advantage of that option. One answer would be compulsory annuitisation, which is what Britain imposed for many years. Pensions are subsidised through the tax system to generate a lump sum that can be used to buy a retirement income to prevent the elderly from becoming a burden on taxpayers.

If workers in DC schemes fail to buy an annuity, they face the risk that they may outlive their savings. Even those British workers who do buy an annuity tend to go for a flat-rate version, running the risk that inflation will erode their purchasing power.

The legal requirement to buy an annuity has been weakened in recent years. And British enthusiasm for annuities will have been dampened further by a European Court of Justice decision last month that stopped insurance companies from discriminating on the ground of gender. Traditionally, men have received higher annuity payouts because their life expectancy is shorter. In future, annuity rates for men—the main buyers of the product—will have to be cut, perhaps by 5%, to bring them in line with rates for women. In effect, men will be underpaid.

Employees in America do not like annuities. “People hate losing control of their money,” says Seth Masters of Alliance-Bernstein. If their capital is tied up, pensioners may not be able to meet sudden health-care bills; they will be exposed to the credit risk of the insurer, which the collapse of AIG in 2008 showed to be a real danger; and in some cases their heirs may get nothing.

The American insurance industry has tried to get around this problem by offering variable annuities, which they like to call a “living benefit”. The investor puts in a lump sum, which is guaranteed for repayment, and the insurer increases this guarantee at a set rate each year. The idea is to give investors both a level of security and some protection against inflation. But this market still attracts only a small fraction of DC assets.

That may be because investors suffer from a condition called “money illusion”. They prefer having a lump sum to an inflation-linked income. As Tony Webb of the Centre for Retirement Research in Boston points out, a pension pot of \$1m will buy an inflation-linked annuity of just \$45,000 a year. “Retirees would go from being a millionaire to barely being in the middle class,” he says.

This apparently low annuity rate reflects increasing life expectancy. If an American married couple both retire at age 65, there is a 50% chance that one of them will live to 90. But pensioners tend to underestimate how long they will live.

A further complication is that people's spending profile after retirement tends to be U-shaped. When they first leave work, they are still active and keen to travel and spend money. As they reach their mid-70s they stay at home more and spend less. In their 80s their costs may rise again because of higher health-care bills or because they have moved to a nursing home.

If workers are not required to use all of their pension pot to buy an annuity, it seems sensible to ensure they make provision for their basic needs. In a report on retirement design, Mercer

suggests dividing the pension pot into three: one from which to draw income for the first 15 years after retirement, aiming at a 50% replacement ratio; a second to be set aside to meet the higher costs of advanced age; and the rest for discretionary spending.

But this will be possible only if workers learn to regard their DC plans as the basis for an income stream. According to Geoff Manville, head of government relations at Mercer, the Obama administration is looking into a policy change that would require DC sponsors to give members a rough idea of the level of annuity they might expect. That could be another nudge in the right direction. ■

## PUBLIC-SECTOR PENSIONS

# State of war

## Taxpayers versus public-sector workers

AMERICANS ARE USED to debates on the financial health of their Social Security system at the national level, but many will have been caught unawares by a pensions crisis in their state and municipal governments. Already one small city—Prichard, Alabama—is unable to pay its pensioners. The crisis has exposed the potential conflict between public-sector workers who still enjoy DB pensions and private-sector workers who get less generous DC pensions—and at the same time have to fund the benefits being paid in the public sector through their taxes. Years of underfunding mean that more contributions to public-sector plans are needed, and soon. But since most states have balanced-budget requirements, such contributions can come only from higher taxes or cuts in services.

Reform of public-sector pensions is inherently difficult. The biggest liability is promises made to existing employees. Court decisions have suggested that these promises cannot be withdrawn; states may not even be able to limit the future accrual of pension rights by existing workers. In California the Little Hoover commission, which in February reported to Jerry Brown, the state's governor, concluded that courts had protected employees' pension rights “as structured on their first day of work”.

It seems odd that private-sector employers can restructure their pension plans and public-sector employers cannot. The best that local governments can do is change the system for new employees, a process that will take decades to bear significant fruit, or to increase employees' contributions. Even that amounts to a pay cut, creating the potential for dispute with the unions. In Wisconsin unions have swallowed higher contributions but balked at attempts to restrict their bargaining rights.

## Putting off the evil day

The funding crisis in public-sector pensions is, in large part, the result of post-dated cheques written by politicians in the past. As Roger Lowenstein, a journalist, recounts in his book “While America Aged”, there has been a “devil's pact” in which politicians granted benefits to unions without funding those promises properly.

A classic illustration comes from San Diego, California. In 2002 the funding ratio (the proportion of pension liabilities covered by assets) of the city's pension scheme dropped close to 82.3%, a level that should have triggered a rise in the contribution to make up the shortfall. That would have required a tax in- ►►

# A storm in the windy city

When pension promises become unaffordable



ILLINOIS AND ITS largest city, Chicago, epitomise much of what is wrong with pensions in America. A commission set up by the previous mayor, Richard Daley, found that, even using the most generous accounting method, in 2009 the city's four largest schemes were just 43% funded, with a combined deficit of \$14.6 billion.

In February the state borrowed \$3.7 billion from the bond markets just to fund its pension contribution. Such an issue is, in effect, a gamble that the fund can earn more from its investment portfolio than it pays on the bonds (as much as 6% for those maturing in 2019). Similar bonds have been issued by other states, but an analysis by the Centre for Retirement Research in Boston concluded that they were generally issued "by the wrong governments at the wrong time". State governments are unlikely to have the market-timing skills of hedge funds.

The battle lines are being drawn. Rahm Emanuel, Chicago's new Democratic mayor, acknowledged the need for pension reform in his campaign, which cost him union support. Mike Quigley, a Democrat who succeeded Mr Emanuel in his Congress seat in 2009, says that "pen-

sion reform is the can that has been kicked farthest down the road."

For the unions, the answer is simple. Workers have been contractually promised pension benefits and have made their required contributions each year. It is no fault of the workers that the state has not funded the pensions properly, or that a banking crisis has caused the stockmarkets to underperform. Hank Scheff of the American Federation of State, County and Municipal Employees (AFSCME) thinks the answer lies in the tax system: "Illinois has an antiquated financial structure with a flat income tax and a narrow sales-tax base." AFSCME points out that, for all the adverse publicity about lavish provision, the average public-sector pensioner in Illinois receives only \$22,000 a year. Almost nobody works for the 45 years needed to retire on a full pension, worth 75% of salary.

In the absence of reform, there will be a big hole for taxpayers to fill. Take the funds with the most generous benefits, those covering the fire service and the police. The state has proposed bringing up the plans to a 90% funding ratio over the next 25 years, but even with that leisurely timetable it will be costly. Gene Saffold, the

chief financial officer under the previous mayor, says the plan would involve an increase in the city's contribution from \$272m in 2010 to \$865m in 2015. The state would raise this money from property taxes, triggering the largest property-tax hike in the city's history.

So instead Mr Saffold proposed aiming at a funding ratio of 80% within 50 years, with employees' contributions being raised by 1% a year for three years from 2015. But that would still cause the city's contribution to double. And any tax rise to deal with the pension hole will come on top of the jump in state income taxes from 3% to 5.25% and a significant increase in business taxes unveiled this year to deal with the running deficit.

## Tug-of-money

Will such money ever be paid or will taxpayers revolt? "What I tell the folks in the unions is that these pension promises are a mirage. The money isn't going to be there," says Mr Quigley. So the stage may be set for a legal and constitutional battle in which the authorities try to reduce the pension bill and the unions challenge them in court.

► crease. To avoid this, the city did a deal with the unions whereby it would raise future benefits in return for not having to lift contributions. In other words, faced with a hole in the fund, the authorities dug deeper.

In theory, states and municipalities are required to make an actuarially determined contribution to their pension funds each year. In practice, some have failed to make such contributions in the face of budget pressures (New Jersey is a repeat offender). That means they are implicitly relying either on the investment portfolio to bail out the fund or on future taxpayers to contribute even more to make up the shortfall. But the stockmarket has stagnated since 2000 and state coffers have been bare.

The bill is now coming due. The Little Hoover commission

estimates that contributions to California's public-sector pension funds will have to rise by 40-80% in five years' time and stay at those levels for decades. In Los Angeles, total retirement costs (including health care) already make up 18% of the city's budget, a share that is set to rise to 37% by 2015. In New York, the Manhattan Institute reckons that the taxpayer's contribution to the teachers' fund will have to rise from \$900m now to \$4.5 billion by fiscal 2015-16.

Voters are furious, and have been outraged even more by two related issues. One is the lavish pensions paid to retired city and state executives; in California, over 9,000 such pensioners are getting more than \$100,000 a year. The second is "spiking". In a final-salary scheme, earnings in the last year before retirement ►►



► can be crucial in determining the pension; these can be boosted by, for example, offering the employee a promotion or a large amount of overtime. Some states have now moved to making pensions dependent on average income over several years.

To be fair, fat-cat pensions in the public sector are far from typical. According to Alicia Munnell of the Centre for Retirement Research in Boston, the mean public-sector pension is just \$20,000 a year, well below the average wage. But public-sector workers still seem to be getting a better deal than their private-sector equivalents, who usually have to work for 40 years to get full benefits. In the public sector the qualifying period is often shorter; in California, for example, highway patrol officers retire at 50, after an average of 28 years of service.

This is partly an accounting issue, of which more in the next section. But it also raises questions of transparency. Neil Record, a fund manager, argues that the pay deal offered to a DC plan member is clear; it consists of basic salary and the employer's contribution to the plan. A DB member, by contrast, gets his salary plus the employer's promise to make up any pension-fund shortfall. This guarantee is very valuable, particularly when markets plunge, as they did in 2008. So comparing the public and the private sector becomes extremely difficult and taxpayers cannot tell whether they are getting a good deal.

Creditors, as well as taxpayers, are waking up to the scale of the problem. In January this year Moody's, a rating agency, published research showing combined totals for individual American states' public and pension debt. It used the pension funding ratios calculated by the states themselves, which almost certainly understate the size of the hole. Measured by the ratio of this combined debt to state GDP, Hawaii has the biggest hole, with a ratio of 16.2%. Thirteen other states have ratios of more than 10%. Those figures may sound modest, compared with the 100%-plus ratios seen in Greece and Japan. But the states do not have first claim on their GDP; the federal government deducts its share through income and corporate taxes, so citizens of those states need to service both their own burden and the federal debt. ■

## VALUING PENSIONS

# Pick a number, any number

## The discount rate makes all the difference

HOW SHOULD A pensions promise be valued? Clearly, it is not as simple as comparing the benefits paid with contributions received each year. Offering a pension to an employee today will involve payments decades into the future. Those future payments have to be discounted at some chosen rate to calculate the current value of a pension scheme's liabilities and to allow the employer to select the right contribution rate.

In the late 20th century the actuaries who advised pension funds thought a high rate was appropriate. Pensions are a long-term liability, so the employer can take a long-term view, buying equities and riding out the vicissitudes of the market. This will earn a higher return (the so-called equity-risk premium) than can be got from government bonds or cash. The contribution rate can be set to reflect this higher expected return.

For a while this view seemed to be borne out by the long bull market in equities. Many pension schemes were in surplus, allowing employers to take contribution holidays and to im-



prove benefits. Few were inclined to question the numbers. "In the old days the actuaries were like Catholic priests handing down the word of God, in Latin, to the masses," says John Ralfe, a pensions consultant.

But in the late 1990s the approach came under increasing attack from a school dubbed the "financial economists". They argued that the equity-risk premium, as the name suggests, was a reward for risk and could not be guaranteed. Even if equity returns were disappointing, pensions still had to be paid. In effect, pensions are a debt like any other, and should be discounted with a bond yield.

Furthermore, given the bond-like nature of the liability, pension-fund sponsors were in effect borrowing money to invest in risky assets. Companies should thus try to match their assets with their pension liabilities, buying bond-like investments.

This reasoning gained further force when accounting standards were changed, initially in Britain, to make companies use the AA-rated corporate-bond yield to discount their liabilities. This meant that sudden falls in the equity market, or changes in bond yields, had a big impact on a company's balance-sheet. As it happened, the accounting change was followed by the big bear market in equities of 2000-02.

Now this debate has moved to the public sector. American public-sector pension funds still discount their liabilities by an assumed rate of return, often 8% a year. Some still argue that, because public-sector bodies will always be around, they can afford to take a long-term view. But economists such as Joshua Rauh of Northwestern University in Illinois argue that a pension promise is a senior debt. When the city of Vallejo in California declared bankruptcy, bondholders were offered 5-10 cents on the dollar but pension benefits were left untouched. That makes it seem logical to use a risk-free rate, like the Treasury bond yield, to discount the liabilities. On that basis, the unfunded liabilities of individual state pension funds are more than \$3 trillion, compared with \$1.2 trillion using the accounting method adopted by the states themselves.

Congressman Devin Nunes of California has put forward a bill that will require states to move to more transparent accounting, on pain of being barred from issuing tax-exempt municipal bonds. Since these are a vital source of state financing, more ►►



► transparent accounting will in effect become compulsory if the law passes. “I tried to look into the pensions problem in California and discovered that you couldn’t find the information,” says Mr Nunes. “But the bill will create a one-stop location for the information.”

The problem with underfunding a public-sector pension scheme is twofold. First, it assumes that the employer will be able to make larger contributions in future to fill the hole, which may be unrealistic. Second, if a fund has to sell assets at market lows to pay benefits, it will not be able to take full advantage of market rebounds.

The argument is complicated enough when it comes to funded pensions. But what about unfunded ones? Taxpayers, and government bondholders, have the right to know the value of such promises. That was the conclusion of an advisory group in Britain that reported on the subject last month.

Unfunded schemes cannot use the assumed rate of return on their assets because they do not have any. One possible measure would be the growth rate of the economy, since tax revenues (which will fund the pensions) should rise in line with GDP. The problem lies in estimating the future growth rate. In 1990 the Japanese government would have forecast a much higher growth rate than it actually achieved.

The financial economists say that the discount rate should be based on the inflation-linked government bond yield, because British public-sector pensions are inflation-protected. As index-linked yields are currently very low (below 1% in real terms), that makes the British shortfall on public-sector pension funding look very large, at around £1 trillion, or 81% of GDP.

Any market-driven rate has its problems. One reason why the British inflation-linked yield is so low is that so many pension funds own the bonds for accounting reasons. Perversely, therefore, the more they try to hedge their liabilities, the bigger they get. In addition, real yields have been highly variable. “Using a market discount rate can introduce a spurious degree of accuracy and a lot of volatility,” says Chris Curry of the Pensions Policy Institute in London.

The details may seem arcane, but huge sums are at stake. Actuaries, the backroom boys of finance, may yet find themselves at the heart of political debate. ■

#### THE OUTLOOK FOR PENSIONS

## Sharing the burden

### Reforms are inevitable. The only question is what sort

THIS SPECIAL REPORT has shown how the cost of providing pensions is rising across the developed world as the baby-boomers retire. Rich countries now face difficult trade-offs. They must keep costs in check without condemning many elderly people to decades of poverty. And if they move from a tax-funded system to one dependent on the performance of the stockmarket, more risks and costs will pass to the workers.

There is no perfect set of reforms because no two countries are starting from the same place. The OECD finds that the current net replacement rate from all pension income for a worker on average earnings ranges from under 40% in Japan to over 111% in Greece. In a survey conducted by Mercer that ranked the overall pension systems of different countries by criteria such as adequacy and sustainability, no country was awarded an A grade; the best-performing countries (the Netherlands, Switzerland, Sweden, Australia and Canada) got a B. But at least all countries avoided the bottom mark, an E.

The best way of reducing the overall pensions burden, almost everyone now agrees, is for people to work longer. They will get paid for the extra years, national output will be boosted and the cost of pensions will fall. Reforms are already pushing workers in that direction. Thanks to the steady demise of defined-benefit schemes in the private sector, employees will be more prepared to do so because they need to build up higher pensions in defined-contribution schemes. And as the supply of younger workers dries up, employers will become more willing to use older ones. With rising life expectancy, the pension age across the board is probably heading for 70.

Inevitably, however, some workers will be physically unable to go on working into their late 60s. Any increase in the retirement age will have to come with a safety net for such people, ►►



► which will reduce the potential savings.

An increase in the retirement age on its own is unlikely to be enough. Broadly speaking, the sort of reforms required depend on whether a country's system is mainly pay-as-you-go or funded, and whether it offers DB benefits linked to final salary or whether it has a significant DC element. For countries with PAYG schemes, the first step is to increase the present retirement age—and then to link it to future increases in longevity.

### You know it makes sense

The second step is to halt the widespread practice of retiring long before the official pension age. This should be allowed only if benefits are reduced on an actuarially sound basis, and ideally only if those concerned are genuinely unable to work. Martin Baily and Jacob Kirkegaard of the Peterson Institute reckon that in the European Union eliminating retirement before the official age would offset the effect of ageing populations for the next 20 years.

Countries on a PAYG system are usually stuck with it for the bulk of their pension provision, even if they believe that making workers more responsible for their own pensions would increase the national saving rate. Switching to a funded model would involve making current taxpayers pay twice: once to fund existing pensioners and again to fund their own pensions.

Notional DC schemes get around this problem by dispensing with a fund. Employees accrue a notional benefit each year which is converted into an income at retirement, using annuity rates. This keeps the lid on costs and at the same time encourages people to keep working (since annuity rates rise with age). Italy, Poland and Sweden have all introduced versions of notional accounts in recent years. But such arrangements still leave taxpayers on the hook for pension costs.

If higher retirement ages in countries with insurance-based state schemes do not make them actuarially sound, then taxes should be increased, or benefits reduced, until they are. If benefits are cut, those on the lowest incomes need to be protected.

In countries where DB schemes remain in place, largely in the public sector, switching to pensions based on a career average rather than final salary would make sense. As the European Commission puts it, “basing pensions on a limited number of best or final years tends to be regressive, because the people with final or best years substantially above their lifetime average earnings tend to be those that earn the most.”

Public-sector employees should not be retiring sooner than private-sector ones, but aligning the pension age across the board will have to be handled sensitively, since many workers

cannot be touched, and that may include the age at which they are able to retire. Individual states will have to tackle this issue one by one, either by changing the law or by amending the constitution. But it could take a severe fiscal crisis, threatening default on municipal debts, to generate the political will for reform.

Josh Barro of the Manhattan Institute in New York suggests giving public-sector employees three options; a DC plan with lower contributions; a DB plan that will accrue benefits at a slower rate on existing contributions; or a DB plan that preserves existing benefits but with much higher contributions. The boldest step would be to switch public-sector workers to DC schemes, bringing them in line with the private sector. Such schemes suit a more flexible workforce, boost the job prospects of older workers and prevent employers from turning into mini-insurance companies, the plight that befell America's carmakers. The downside of DC schemes is that contributions tend to be lower and investment risk (and, in many cases, longevity risk) switches to the employee.

Contribution rates can be increased with the help of “nudge” measures such as auto-enrolment and auto-escalation. Seeing friends and neighbours struggle with inadequate pensions can be a powerful incentive to save more. Employers can help by regularly projecting the likely level of income that their employees' pension pots will generate.

That leaves the problem of bad investment decisions. Large employers now opt for target-date or “lifestyle” funds which, although far from perfect, at least give workers a diversified portfolio. The costs of such plans need to be closely watched, however, since they can represent a large drain on the pension pot.

Denmark gets around many of these difficulties with its collective DC system. This scheme, known as ATP, is compulsory for all employees and is designed to top up the basic state pension. Economies of scale keep costs very low, at 0.04% a year. Benefits are linked to annuity rates, protecting both the scheme and the pensioners from annuity risk. Inflation-linking is offered only when the scheme can afford it. However, both the contributions paid and the benefits provided are relatively low. If they were higher, the system might be regarded as an onerous form of taxation rather than a benign savings plan.

That is the problem with pension reform. None of the solutions—a longer working life, higher taxes, lower benefits, saving more—is likely to be popular. But the rich world's pension planning has seriously fallen short. The sooner that shortfall is tackled, the easier it will be. ■



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**THE FIRST STEP IS TO INCREASE THE PRESENT RETIREMENT AGE.  
THE SECOND STEP IS TO HALT THE WIDESPREAD PRACTICE OF  
RETIRING LONG BEFORE THE OFFICIAL PENSION AGE**



will have planned their lives in the expectation of being able to retire early. The proposals in Britain's Hutton report seem sensible: allow workers to keep their existing rights but link any future pension rights to the state pension age.

In America, though, even such modest reform does not seem to be possible at the moment. With a more favourable demography than Europe, a growing workforce and a well-developed pensions market with assets of more than 100% of GDP, it is odd that the country should have a pension problem at all. Yet in many states the current legal position appears to be that the pension rights of existing workers, both accrued and yet to be earned,