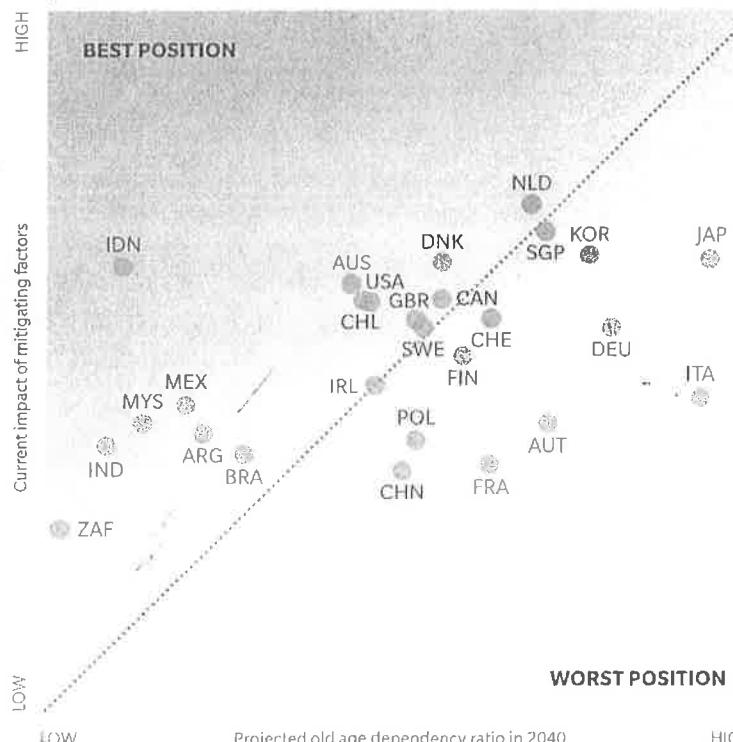
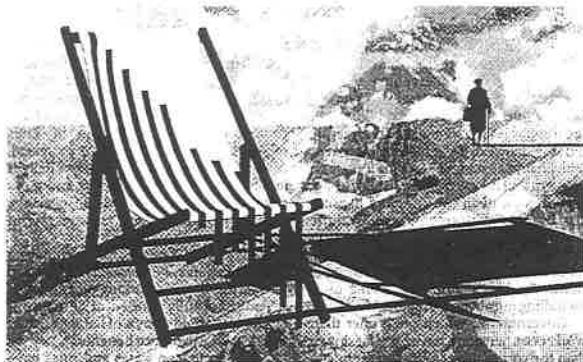


# MELBOURNE MERCER GLOBAL PENSION INDEX

OCTOBER 2016

Grade	Index Value	Countries	Description
A	>80	Denmark Netherlands	A first class and robust retirement income system that delivers good benefits, is sustainable and has a high level of integrity.
B+	75–80	Australia	
B	65–75	Finland Sweden Switzerland Singapore Canada Chile	A system that has a sound structure, with many good features, but has some areas for improvement that differentiates it from an A-grade system.
C+	60–65	Ireland UK	
C	50–60	Germany USA France Malaysia Brazil Poland Austria	A system that has some good features, but also has major risks and/or shortcomings that should be addressed. Without these improvements, its efficacy and/or long-term sustainability can be questioned.
D	35–50	Italy South Africa Indonesia Korea (South) China Mexico India Japan Argentina	A system that has some desirable features, but also has major weaknesses and/or omissions that need to be addressed. Without these improvements, its efficacy and sustainability are in doubt.
E	<35	Nil	A poor system that may be in the early stages of development or non-existent.





## Pensions

## Fade to grey

**It costs a lot more to fund a modern retirement. Employers, workers and governments are not prepared**

EMPEROR AUGUSTUS came to power with the help of a private army. So he was understandably keen to ensure the loyalty of his soldiers to the Roman state. His bright idea was to offer a pension for those in the army who had served for 16 years (later 20), equivalent in cash or land to 12 times their annual salary. As Mary Beard, a classical historian, explains in her history of Rome, "SPQR", the promise was enormously expensive. All told, military wages and pensions absorbed half of all Rome's tax revenues.

The emperor would not be the last to underestimate the burden of providing retirement benefits. Around the world a funding crisis for pension schemes is coming to the boil.

Rahm Emanuel, Chicago's mayor, is struggling to rescue the city's pension plans; the municipal scheme is scheduled to run out of money within ten years.

In Britain the pension problems of BHS scuppered attempts to save the high-street retailer; the same issue is complicating a rescue of Tata Steel's British operations.

There are two reasons that funding pensions is becoming ever more troublesome. First, people are living longer. In 1960 the average American, British or Japanese 65-year-old man could expect to live for another 12-13 years. Women could look forward to 14-16 more birthdays. Now it is 18-19 years for men and 20-24 years for women.

Funding decent pensions is all the more difficult given that the proportion of retired workers is also growing. Around 600m people aged over 65 now make up around 8% of the world's population; by 2050 there will be 1.6 billion, more than 15% of the total. Some countries face a bigger problem than others. In Japan, a third of the population will probably be over 65 by 2050; in Europe, the proportion will be more than a quarter.

Second, the low level of interest rates and bond yields means the cost of paying pensions has gone up, even without the

come it will generate. In time, this will create its own huge problems as workers face an impecunious retirement.

Actuaries and financial economists started to think more deeply about how to account for pension costs in the 1990s. Using investment returns is theoretically dubious. A company is required to pay pensions whether or not high investment returns are achieved. A pension promise is like a bond; a promise to pay a series of cashflows in future. That suggests the yield on long-term debt is the appropriate discount rate. In the early 2000s accounting regulations began to require companies to use a corporate-bond yield as the discount rate. Since the bond yield was much lower than the assumed investment return, the effect was to increase the stated level of pension liabilities.

## You're a liability

Bond yields have fallen steadily and so liabilities have risen significantly. In Britain the fall in yields following the unexpected Brexit vote (and a renewal of quantitative easing by the Bank of England) has made matters considerably worse. PwC estimates that the total deficit of all British DB pension funds rose by £100 billion in August alone. The Bank of England, which matches its pension liability by buying inflation-linked government bonds (as theory suggests), was forced to pay 55% of its payroll on pensions last year.

Finance directors must feel like Sisyphus, doomed to push a rock uphill for eternity. In America, the estimated deficit »

## Briefing The fall in interest rates 25

longevity factor. Investors who have to buy their own pensions know this only too well. In the late 1990s, £100,000 (\$164,000) would have bought a 65-year-old British man a lifelong income of £1,170 a year; now it will earn £4,960, according to Moneyfacts, a data firm. In other words, paying out a given level of income now costs more than twice as much as it did.

Government-bond yields in rich countries are at historically low levels; in some countries, they are even negative. This has a direct impact on pension deficits, by increasing the value of future pension liabilities. Because the cash cost of a pension will not fall due for decades, pension schemes must discount this cost at some rate to calculate how much they need to put aside now. If the cost next year will be \$100, and the discount rate is 5%, then the cost in today's terms is \$95. The higher the discount rate, the lower the present cost.

For a long time, most company pension schemes used the assumed rate of return on their assets as the discount rate. The rationale was simple: a combination of contributions and investment returns will eventually pay the benefits. But this approach was prone to wishful thinking: if markets have performed well in the past, the temptation is to assume they will continue to do so. The higher the assumed future return, the less cash the company has to put aside today.

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## 26 Briefing The fall in interest rates

of large firms at the end of last year was \$570 billion, according to Mercer, a consultancy. The average funding level was 77%. In Britain publicly quoted companies in the FTSE 350 paid £75 billion into their schemes between 2010 and 2015, according to Mercer, but their collective deficit still grew by £34 billion over the same period.

## Stirring the pension pot

The struggles of the private sector create a public-policy problem. A 20-year-old worker may still be receiving a pension 70 years hence. Few companies can be relied on to last that long. If a company goes bust while its pension scheme is underfunded, the result could be an unhappy retirement. To safeguard pensions the American and British governments set up insurance schemes that stand behind corporate plans; the Pension Benefit Guaranty Corporation (PBGC) in the former and the Pension Protection Fund (PPF) in the latter. Both fund themselves through levies on the corporate-sector plans they insure; both cap the amount of pension protection that individual workers receive.

Creating the PBGC and PPF has recast the problem of more expensive pensions in a different form. Regulators try to protect schemes by ensuring they are well-funded and that companies do not take advantage of the potential "moral hazard"—underfunding their plans because of the insurance protection. But make funding of the schemes too strict and firms will complain; some may even be forced to the wall.

So the temptation is to allow a lot of flexibility and hope that funding levels recover. BHS went into administration (the British equivalent of Chapter 11 bankruptcy protection) with a pension deficit of £571m. The company has been struggling for years; it had a recovery plan for its pension scheme that was scheduled to take 23 years. Should the regulator have allowed the company such latitude? The regulator is negotiating with the business's previous owner, Sir Philip Green, about his making payments that will reduce the deficit. The saga has triggered a fierce debate about the moral and legal responsibility of business owners to ensure pension schemes are fully funded.

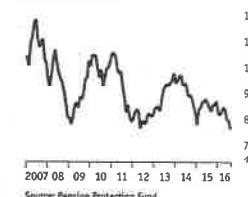
In America the PBGC depends on Congress to ensure it is properly resourced. As well as covering the pension plans sponsored by large firms, the PBGC backs schemes in industries with lots of small employers, such as mining and trucking. At the moment the PBGC estimates that it faces a potential liability of \$52 billion on these multi-employer schemes over the next decade. The Central States pension fund, responsible for the benefits of 400,000 truck drivers and warehouse workers, recently said it would run out of money by 2025. But Congress has set a levy of just \$27 for this type of employee per

year; an annual sum of only \$270m, ludicrously short of the amount needed.

The PPF is better funded than the PBGC. It has reserves of more than £3.6 billion before the impact of intervening at BHS's fund (and possibly Tata Steel's). Nevertheless, the fund has assets of £23 billion and the companies it covers have an aggregate funding deficit of £459 billion. Moreover, both insurance schemes face the long-term problem that they were established to back DB schemes, often set up many decades ago by manufacturing firms. As those types of companies die off, new services and technology firms are not joining the fund, because they do not offer DB pensions. The levy's burden is falling on a dwindling number of companies.

Governments, which often offer their workers DB pensions, have been farslower than the corporate sector in attempting to

Falling short  
British companies' pension schemes  
Assets as % of liabilities



Source: Pension Protection Fund

reduce the cost. In large part this is because of the way they account for pensions. In America they are allowed to assume a return of 7.5-8% on their investments, making deficit look a lot smaller. But generous accounting assumptions do not make the problem go away. The Centre for Retirement Research (CRR) at Boston College has looked at around 4,000 American state and local-government pension plans. Even using the accounting standards permitted, the plans were on average 72% funded at the end of 2015. On a more conservative 4% discount rate, this drops to 45%. On the former basis, the collective deficit is \$1.2 trillion; on the latter \$4.4 trillion.

Difficulties are starting to emerge in America. Detroit's bankruptcy in 2013 was in part the result of a huge shortfall in its pension fund; some retired workers suffered cuts to their income and health-care benefits. But the city still has a long-term pension problem, with a \$195m payment to the plan due in 2024. Cities in better health than Detroit are also grappling with the pensions burden. In Texas, Fort Worth's credit rating was reduced by Moody's, a rating agency, in May in response to a \$1.5 billion pension-fund shortfall.

The hole keeps getting bigger. Required

## The Economist September 24th 2016

public-sector employer contributions have nearly trebled as a proportion of payroll since 2001. But in practice, they have not been paid: since 2006, contributions have been regularly less than 90% of what is due. Closing the deficit will require higher taxes, or benefit cuts. But states and local governments are constrained by laws which say that benefits, once promised, cannot be reduced. Unless markets deliver implausibly high returns, more and more cities and states will be forced to juggle the interests of workers and taxpayers, with angry voices on both sides.

What is the answer? The Dutch have a robust pension system which is still linked to salaries. The regulations demand that schemes are fully funded at all times; if funding falls below 105% of liabilities, then there is scope to reduce benefits.

Some American states and cities have likewise been able to reduce their pension costs by limiting the amount of inflation indexation that applies (of course, that will only work if there is some inflation). In Arizona, voters approved in May a proposition that limited inflation increases for policemen and firefighters to 2% a year. But aping the Dutch model in America and Britain would require huge amounts of money to eliminate current pension deficits—money that employers may not have available.

The private-sector funding problem will, at least, diminish in the long run as old DB schemes run down. But there will be no respite for governments. They have been slow to switch workers to DC schemes, because the power of public-sector trade unions to resist lower benefits is greater than in much of the private sector. A two-tier system may emerge, with retired private-sector workers finding themselves worse off than their public-sector counterparts, but still funding those luckier workers through their taxes.

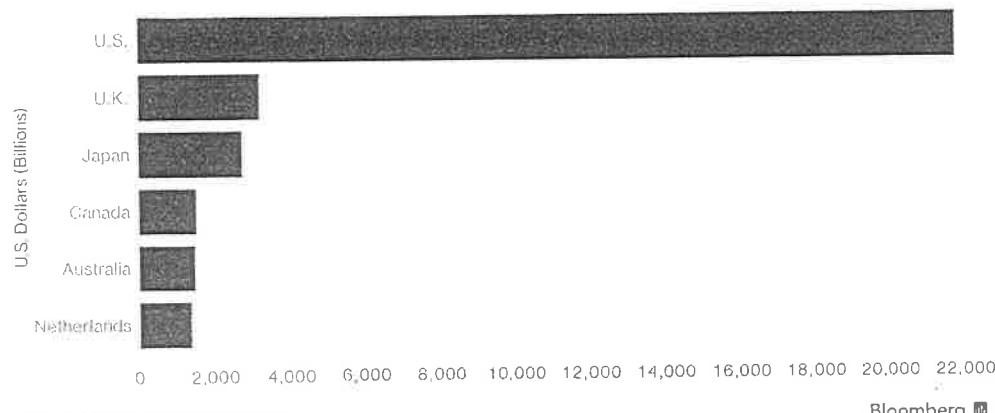
## Retired hurt

This is a slow-motion crisis in which the casualties—the weakest companies and cities—appear intermittently rather than all at once. Although the commitment to pay retired public-sector workers is in effect a debt, it does not show up in the official figures. Nine countries—Australia, Britain, Denmark, France, Germany, Italy, Poland, Portugal and Spain—have public-sector pension liabilities of more than 300% of GDP, according to Citigroup.

The essence of the problem is clear. Low rates mean that employers and workers need to put more money aside for retirement. Many are either not contributing enough or ignoring a problem that seems a distant threat. They would do well to remember that in Augustus's time the Roman Empire looked invincible. But the troubles that overwhelmed it were already taking firm root. ■

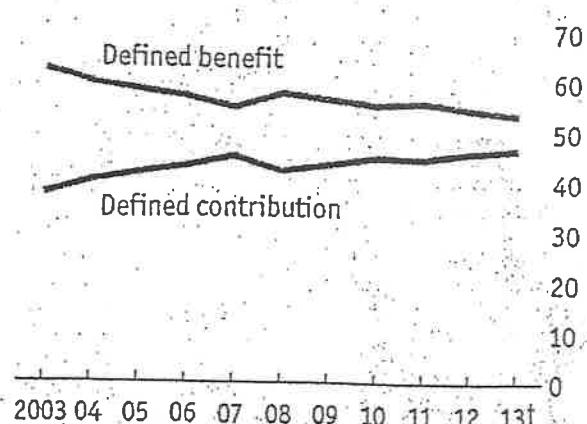
## Global Pension Assets 2015

More than 60 percent of global pension assets are held in the U.S.



*The Economist, May 3, 2014*

Pension assets\*, % of total



Source: Towers Watson

\*US, Australia, Britain, Canada, Japan, Netherlands and Switzerland. TEstimate

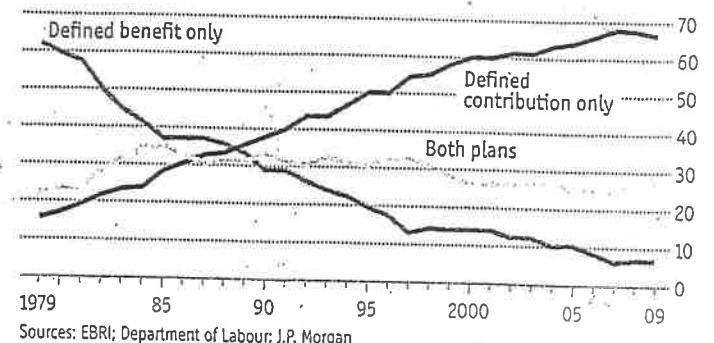
## Pension funds

Assets as a % of GDP, 2012



## So long, DB

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



*The Economist April 9th 2011*

# Boeing's New Labor Contract Improves Wages, Phases Out Pension Plans

*International Business Times,  
Feb 18, 2016*

BY ADITYA KONDALAMAHANTY ON 02/18/16 AT 6:19 AM

Boeing Co.'s engineers' union formally approved a six-year labor contract Wednesday, avoiding a recap of a bitter and contentious months-long negotiation process over the last contract in 2012. More than 70 percent of engineers and technical workers from the Society of Professional Engineering Employees in Aerospace (SPEEA) approved the contract, the union said in a statement Thursday.

The agreement, which is set to come in force after the current one expires in October, included a 5 percent annual compensation boost over five years , along with improved vacation time and provisions for new layoff benefits for employees.

The company also promised to pay its engineers at least 15 percent more than their peers at non-Boeing companies make — and to pay its technical workers a 22 percent premium to the market. While the majority of the 20,100 workers are at Boeing facilities in the Puget Sound region, the contracts also cover workers in Oregon, Utah, California and Florida.

However, the aviation giant phased out its traditional pension plans in Wednesday's contract. While employees hired with pension benefits will be allowed to keep what they've earned, going forward, Boeing will phase out defined benefit pensions and switch all SPEEA workers into "enhanced" 401(k) plans.

The agreements "grew from a strong desire on both sides to find common ground and negotiate contracts that work for SPEEA members and Boeing," said Ryan Rule, president of the union. "It was a unique opportunity that allowed these early contract talks," he added. "We're glad it worked."

Boeing and SPEEA announced that they had reached a tentative agreement earlier in January, reportedly following months of secret negotiations. Boeing thanked its employees Thursday and said in a statement, "This agreement helps position us for continued success in a highly competitive landscape."

On Wednesday, Boeing's CEO Dennis Muilenburg reportedly reaffirmed the company's outlook for strong growth over the next five years at an investor conference, dismissing notions that the aviation industry was close to a downturn.

# UK public sector pension costs understated by £15bn a year

## VIEWPOINT

**John Ralfe**

Royal Mail has just announced plans to replace its very expensive defined benefit pension, for 90,000 of its 160,000-strong workforce, with a much cheaper and less generous defined contribution pension.

The postal company's latest accounts show the existing DB pension costs 30 per cent of pensionable salary after member contributions, versus around 13 per cent for the new DC plan.

Moving to DC will boost Royal Mail's operating profits – just £150m in 2016 – by around £230m in the first year and £300m after that.

When the UK government took on

Royal Mail's existing pension liabilities in 2012, before privatisation, it effectively left a £1.6bn "dowry". This was used for a partial contribution holiday, so the current DB cash contribution is less than the full 30 per cent cost.

Almost all private sector companies have long since closed their DB pensions to new members, so the number of employee members continues to shrink as they retire or leave. Most smaller companies and many large companies have also closed to existing members.

Meanwhile, DB pensions – all but dead in the private sector – are flourishing in the public sector, with more than 5m employee members. All schemes, including those for the NHS, teachers, the civil service, local government and the armed forces, are still open to new members.

The previous government claimed to have tackled the public sector pensions problems highlighted by John

Hutton, the Labour secretary of state for Work and Pensions between 2005 and 2007.

But the coalition government's 2015 changes were a cop-out, and did nothing to bridge the huge and increasing gulf between public sector DB and private sector DC.

The reformed pension did not reduce the annual cost to taxpayers of new pension promises. Savings from imposing a higher retirement age and moving to a pension calculated on a career-average salary rather than a final salary, were more or less wiped out, because a higher pension is earned each year.

The government added insult to injury by saying these changes should last for 25 years.

The total official annual cost of the Teachers' Pension Scheme in 2016 is 20 per cent of salary versus the Royal Mail total cost of 36 per cent. After 9.6 per cent

employee contributions, the net cost to taxpayers is about 11 per cent.

Public sector DB pensions cost so much less than private sector not because the government has some magic beans, but because it deliberately fiddles how it calculates annual costs. Rather than using bond yields

– required by private sector accounting, and reflecting the underlying economics – the government uses a higher arbitrary rate to give a much lower annual cost. –

Helpfully, the Teachers' Pension Scheme accounts disclose costs of calculating via bond yields: 33.8 per cent of salary, or a cost to taxpayers after employee contributions of 24.2 per cent. This is more than twice the official cost.

Across the whole of the UK public sector, the offi-

cial costs of new pension promises are understated by around £15bn a year, versus the costs of calculating via bond yields. (Arguably using a corporate bond, not a gilt rate, understates the real cost.)

To make the real costs crystal clear to taxpayers, all public sector employers should use the same annual costing for new pension promises as private sector employers.

Recognising annual costs properly would make it clear that public sector DB pensions are unsustainable, just like the private sector, and would lead to genuine reform.

Understating annual public sector pension costs means this generation of taxpayers is not paying the full cost of the public services it uses, but passing it on to be paid by future generations – taxation without representation on a massive scale.

*John Ralfe is an independent pension consultant*

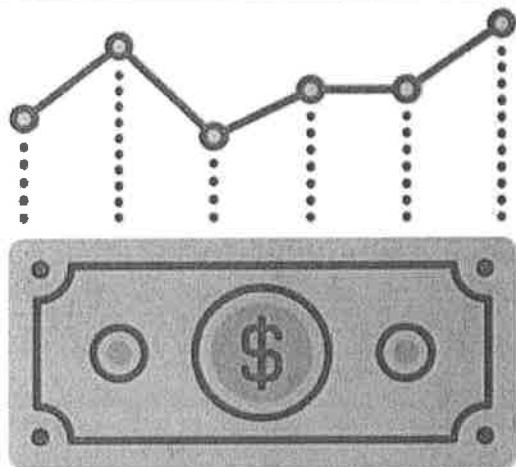


# Pensions & Investments

## Corporate pension funding holds steady in April — 2 reports

By: Rob Kozlowski

Published: May 4, 2017



The funded status of the largest U.S. corporate pension plans remained relatively level in April as strong market performance was offset by falling discount rates, said reports from Mercer and Legal & General Investment Management America.

According to Mercer's report, the estimated aggregate funding ratio of pension plans sponsored by S&P 500 companies was 83% at the end of April, the same as the previous month.

The S&P 500 index gained 0.9% and the MSCI EAFE index returned 2.3% in April, while the typical discount rate fell by seven basis points to 3.94%.

"April was another month in which funded status failed to improve despite rising equity markets," said Matt McDaniel, a partner in Mercer's wealth business, in a news release. "Falling interest rates have now given back most of the ground they gained following the election. Sponsors who were hoping that recent rate increases signaled a long-term trend should re-evaluate their plans for dealing with a prolonged low-rate environment. Recent rate movements could also make lump-sum exercises look more attractive in 2017."

Separately, LGIMA's report showed that the funded status of a typical U.S. corporate pension plan with a 60% allocation to global equity and 40% to core fixed income fell by 20 basis points in April to 83.7% from 83.9%. The gain of 0.8 percentage points due to global equity returns was offset by a 1-percentage-point fall due to drop in the 30-year U.S. Treasury rate to 2.84% from 2.95% the previous month.

## Looming tax reform spurs hefty corporate pension contributions

By: Rob Kozlowski

Facing increased PBGC variable premiums and potential corporate tax reform, U.S. corporations are accelerating their pension contribution schedules. At least four companies have announced significant debt issuances in recent months, the proceeds of which are being used, at least in part, to make hefty pension contributions in 2017, surpassing the original expected contributions that had been announced in 10-K filings with the Securities and Exchange Commission.

The largest contribution was made by Verizon Communications Inc., New York, which in the first quarter made \$3.4 billion in discretionary pension contributions. The contribution was funded by debt, a portion of an \$11 billion offering in March that also funded the Yahoo Inc. acquisition, said Robert A. Varettoni, company spokesman, in an April 20 email. Verizon, in its 10-K filing in February, originally said it intended to make its minimum-required contribution of \$600 million during the year; the additional discretionary contribution brings the total for the year to \$4 billion. As of Dec. 31, defined benefit plan assets totaled \$14.6 billion, while projected benefit obligations totaled \$21 billion, for a funding ratio of 69.3%, according to the company's 10-K.

Other companies that have recently issued debt in order to fund larger-than-expected discretionary contributions are:

E.I. du Pont de Nemours & Co., Wilmington, Del., announced in a May 2 SEC filing that it plans to contribute \$2.9 billion to its U.S. defined benefit plan in 2017, partially funded by new bonds totaling \$2 billion. The company in its 10-K filing in February originally said it intended to make \$320 million in contributions in 2017.

FedEx Corp., Memphis, Tenn., offered \$1.2 billion in new bonds at the beginning of 2017, \$1 billion of which was set to be used to fund pension contributions. The company's fiscal year began on June 1.

Delta Air Lines Inc., Atlanta, contributed a total of \$3.2 billion to its defined benefit plans in March and April, it said in an April 12 SEC filing. The amount was well above the \$1.2 billion the company had announced in its 10-K filing on Feb. 13. The funding of the larger contribution came from \$2 billion in unsecured, investment-grade debt the company issued during the first quarter.

### Tax reform a trigger

Several consultants posit that the emergence of potential corporate tax reform, a key point in President Donald Trump's campaign for the presidency, might have been a chief trigger to inspire companies to make larger pension contributions.

"The fact is there is a potential belief or hope or expectation around tax reform, and whether tax reform will include with it any change in the ability to contribute to pension plans on the same tax-deductible basis we do now," said Ari Jacobs, Aon Hewitt senior partner and global retirement solutions leader. While corporate tax reform is far from a certainty, the administration's initial proposal called for the reduction of the corporate tax rate to 15% from 35%. Whether the reduction is that steep, observers said, there will likely be a reduction of some kind.

Current tax law allows a plan sponsor to deduct a portion of its pension contributions based on its tax rate.

"If I'm paying taxes currently and I can get a 35% deduction in the money I put in my plan now vs. a 15% or 20% deduction in the future, it's a lot cheaper to make that contribution now," Michael Archer, Philadelphia-based senior consultant and leader, client solutions group, North America retirement, at Willis Towers Watson PLC, said in a telephone interview. Adding to that incentive, Mr. Archer said, is that companies have until Sept. 15 to report retroactive deductions for the prior plan year. "Some organizations will act sooner," Mr. Archer said, noting companies don't want to take the risk of a drop in the corporate tax rate.

Joe Nankof, founding partner, head of capital markets/asset allocation at Rocaton Investment Advisors LLC in Norwalk, Conn., agreed the potential for tax reform could be a catalyst in corporations choosing to make large contributions now.

"If (the rate) goes down to 25% or 20%, then you're looking at the after-tax cost of funding the plan goes from 65 cents for every dollar to ... it could be to 85 cents to 75 cents for every dollar on an after-tax basis," Mr. Nankof said. "You'd rather pay 65 cents than 75 cents."

Richard McEvoy, New York-based partner and head of the financial strategy group at Mercer LLC, said that large contributions will continue for some time. "All kinds of sponsors are looking at pretty significant contributions over the next few years as funding relief expires," Mr. McEvoy said, referring to the 2012 Moving Ahead for Progress in the 21st Century Act. "The contributions are coming home to roost, if you will. Coupled with that, if corporate tax rates come down, so do corporate tax deductions, so that makes this year a good year in part if you assume that in future years, contributions won't be as tax-favored."

### Variable rates going up

Mr. Archer said a major reason large contributions are occurring this year is the increase in the variable rates the Pension Benefit Guaranty Corp. will charge U.S. corporate pension plan sponsors.

The PBGC's variable rate is based on the unfunded obligations in a defined benefit plan, as opposed to the fixed rate, which is based on the number of participants in the plan.

"That (variable) rate for 2017 is now \$34" per \$1,000 of unfunded vested benefits, Mr. Archer said. "It's going to be \$38 next year with potential indexing above that, and \$42 in 2019, and again with potential indexing (to inflation) above that."

"Sponsors are loath to pay those premiums," Mr. Nankof said. By paying large contributions into the plans, Mr. Nankof said, it helps the funded status, reduces the premium to be paid, and ultimately goes to the participants. "If you pay a variable premium out of a plan it doesn't do your participants really any good," Mr. Nankof said. "It's something that plans don't really want to do."

An added bonus is that with corporate funding ratios improving, companies gain further ability and incentive to continue derisking their plans and ultimately the ability to transfer out of their plans entirely, sources said.

One hurdle, for example, to group annuity purchases has been the premium. But Mr. Archer noted that the group annuity purchase business has become significantly more competitive in the past few years, which is resulting in smaller premiums on the annuities.

He also noted there were about \$13 billion in group annuity purchases in each of the past two years, with the number of pension buyouts also increasing.

"They're buying out their small-benefit retirees because of the PBGC premium," Mr. Archer said. "If you've got a retiree who's got a \$100 a month benefit, you have a 6.5% or so load from just carrying that person. It's less than a 6.5% load from an insurance premium."

Mr. McEvoy agreed that further derisking of plans is a motivator in pulling the trigger on these large contributions. "It's the ongoing drumbeat and desire to derisk plans," Mr. McEvoy said. "We've seen that for years, and there is a bit of a snowball effect. With these contributions, we can anticipate derisking activity to be the next shoe to drop. Pension contributions just enable more derisking and many frozen plan sponsors getting closer to exiting the plan entirely."

Original Story Link: <http://www.pionline.com/article/20170511/ONLINE/170519978/looming-tax-reform-spurs-hefty-corporate-pension-contributions>

## The US faces crisis as pension funding hole hits \$3.85tn

Collective funding deficit for retirement schemes jumps by \$434bn in one year

US cities and states face a “looming crisis” after the collective funding hole in the public pension system jumped by \$434bn in just one year, raising fears of further Detroit-style bankruptcies.

According to academic research shared exclusively with FTfm, US public pension funds lack \$3.85tn that they need to pay the retirement benefits of current and retired workers.

Joshua Rauh, author of the research and a professor of finance at Stanford Graduate School of Business, said: “[The large deficit in US public pensions] is a looming crisis. It is particularly a near-term issue for a number of cities.”

The situation is especially difficult for cities such as Chicago, which Mr Rauh estimates has unfunded pension liabilities that equal 19 years of the city’s tax revenues.

Fort Worth, New Orleans, Philadelphia and Dallas also have large underfunded pension schemes, while states such as Illinois, Kentucky and New Jersey rank badly in the Stanford research.

Big pension deficits have already contributed to the bankruptcy of several US cities, including Detroit. Puerto Rico, the US territory, this month declared a form of bankruptcy after amassing debt and pension obligations of \$123bn.

Mr Rauh said politicians will have to make unpopular decisions if they are to ward off future financial problems. This could include cutting pension benefits or raising taxes in order to contribute larger sums to public retirement plans.

Devin Nunes, a US congressman, said states and municipalities are refusing to make the hard choices on public pensions.

“Puerto Rico’s insolvency, and its dramatic economic effects on the island’s residents, should be a sobering reminder that you can’t defy economic reality forever.”

According to the Stanford research, which looked at 649 pension plans in the 12 months to June 2015, the most recent year retirement funds have produced accounts for, no US city or state is running a balanced budget for their pension schemes.

“Cities and states are not contributing amounts that are sufficient to fund the new benefits they are promising,” Mr Rauh said. He argued states and cities needed to contribute an additional \$167bn to their pensions in fiscal 2015 to stop the funding hole increasing.

A spokesperson for Orrin Hatch, chairman of the US Senate finance committee, said: “This [research] further underscores the financial risks of the nation’s public pension crisis and the need to act on smart policies that will help secure retirement programmes for Americans that work for state and local governments.”

But Hank Kim, executive director of the National Conference on Public Employee Retirement Systems, a trade body, played down concerns about the size of the funding hole.

He added that policy decisions on pension funds should not be based on a single year’s returns. “Pension funds are resilient if left alone,” he said.

Last week, John Chiang, the California state treasurer, said the state had to reduce its pension obligations by more than \$11bn over the next 20 years, without having to reach deeper into the pockets of taxpayers or the public workforce.

Mr Chiang proposed plans to try to tackle the state’s rising retirement debt by topping up its pension scheme with surplus state money that currently earns less than 1 per cent in returns.

Mr Rauh’s study, which will be published today by the Hoover Institute, a Stanford University think-tank, found the funding hole across the US public pension system ballooned after retirement plans failed to generate sufficient returns.

Pension funds estimate their liabilities based on future returns, with US public retirement plans using an average annual return of more than 7 per cent. But in the year to June 2015, public pension plans generated average returns of just under 2.9 per cent.

Mr Rauh’s research, which assumes a lower rate of return, found that the country’s collective pension hole is three times the size of the official figure. State and local governments say their unfunded pension liabilities stand at \$1.38tn.

Mr Kim dismissed the Stanford research, saying: “Over the 20-30 year time horizon, pension funds have outperformed their rate of return assumption. We believe 7.5 per cent rate of return assumption is achievable in the long term.”

Mr Rauh said the funding deficit of public pensions probably grew to \$4tn in fiscal 2016, while remaining relatively flat so far in 2017 because of buoyant stock markets.

“[The large pension deficit] has the potential to affect the confidence that investors have in buying the bonds of some cities and some states. It also affects the money that cities have to pay for essential services, like schools and roads,” said Mr Rauh.

Ed Bachrach, chairman of the Centre for Pension Integrity, an organisation that studies public pension plans, added: “A government with a serious pension funding problem is like a ship trying to sail with its anchor stuck in the mud.”

THE WALL STREET JOURNAL.  
Wednesday, December 21, 2016

# Calpers Seeks to Cut Investment Targets

By HEATHER GILLERS

Officers of the largest U.S. pension fund recommended Tuesday that their investment targets drop to 7% because of a cash crunch and changing market conditions, a move that would set a more cautious tone for those who manage retirement assets around the country.

The proposal to abandon a long-held goal of 7.5% over three years came during a board committee meeting of the California Public Employees' Retirement System in Sacramento. The rate would drop to 7.375% in fiscal 2017-18, 7.25% in fiscal 2018-19, and 7% in fiscal 2019-20. The Board's Finance and Administration Committee approved the recommendation Tuesday evening and it will move to the full board for consideration Wednesday.

The last time the fund, known commonly as Calpers, lowered its investment expectation was in 2012, when the target dropped to 7.5% from 7.75%.

A reduction would have real-life consequences for taxpayers and cities. It would likely trigger an increase in yearly pension bills for the towns, counties and school districts that participate in California's state pension plan. Any loss in expected investment earnings must be made up with significantly-higher annual contributions from public employers as well as the state.

A drop in Calpers's return assumptions could also put

pressure on other pension funds to be more aggressive about their reductions and concede that investment gains alone won't be enough to fund hundreds of billions in liabilities.

Because of its size, Calpers typically acts as a bellwether for the rest of the pension world. It manages nearly \$300 billion in assets for 1.8 million workers and retirees. Calpers—like many pension funds—doesn't have enough assets on hand to pay for all future obligations.

The Calpers recommendation of 7% followed a weekend of negotiations between Calpers staff, California Gov. Jerry Brown's office and organized labor, according to people familiar with the matter.

Calpers staff wanted the return assumption down to 7% as quickly as possible, these people said. They offered a two-step process, with a drop to 7.25% taking effect in the first year. Unions wanted more than three steps, while avoiding a significant drop in the first year so workers and local governments had time to adjust to higher pension contributions. Calpers eventually offered its three-tiered proposal: 7.375% in year one, 7.25% in year two, and 7% in year three.

The costs are expected to be steep for all Calpers participants. If the rate drops to 7%, the state and school districts participating in Calpers would have to pay at least \$15 billion more over the next 20 years, said spokeswoman Amy Morgan. That number doesn't include cities and local agencies.

Thursday, December 15, 2016

## Lowered Expectations

Public pension funds' assumed rates of return have dropped significantly over the past 15 years.

■ Average assumed rate of return

■ Calpers assumed rate of return

8.4%

8.2%

8.0%

7.8%

7.6%

7.4%

2001 '04 '06 '08 '10 '12 '14 '16

Note: 2016 data through Dec. 9

Source: National Association of State Retirement Administrators' database of 127 key public pension plans.

THE WALL STREET JOURNAL.

## Buttonwood |

The rules encourage public-sector pension plans to take more risk

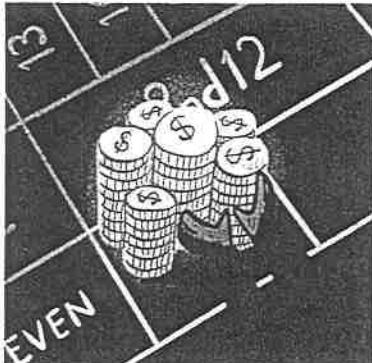
**I**MAGINE two kinds of investment funds, both of which have the same aim: to provide pensions for their employees. You might think that they would invest in a similar way. But when it comes to American pension funds, you would be wrong. It turns out that public funds have a rather different, and more aggressive, approach to risk from private ones (and indeed from their counterparts in other countries).

As a recent paper\* by Aleksandar Anđelović, Rob Bauer and Martijn Cremers shows, that different approach is driven by a regulatory incentive—the rules that determine how pension funds calculate how much they must put aside to meet the cost of paying retirement benefits. Usually, the bulk of a pension fund's liabilities occur well into the future, as workers retire. So that future cost has to be discounted at some rate to work out how much needs to be put aside today.

Private-sector pension funds in America and elsewhere (and Canadian public funds) regard a pension promise as a kind of debt. So they use corporate-bond yields to discount future liabilities. As bond yields have fallen, so the cost of paying pensions has risen sharply. At the end of 2007, American corporate pension funds had a small surplus; by the end of last year, they had a \$404 billion deficit.

American public pension funds are allowed (under rules from the Government Accounting Standards Board) to discount their liabilities by the expected return on their assets. The higher the expected return, the higher the discount rate. That means, in turn, that liabilities are lower and the amount of money which the employer has to put aside today is smaller.

Investing in riskier assets is thus an attractive option for a public-sector employer, which can tap only two sources of



funding. It can ask its workers to contribute more, but since they are well-unionised that can lead to friction (after all, higher pension contributions amount to a pay cut). Or the employer can take the money from the public purse—either by cutting other services or by raising taxes. Neither option is politically popular.

Unsurprisingly, therefore, the academics found that American public pension funds choose a riskier approach. Theory suggests that as pension funds mature (ie, more of their members are retired), they should allocate their portfolios more conservatively, because the promised benefits need to be met sooner and funds cannot risk a sudden decline in the value of their assets. That is the case with private-sector pension funds, but public funds take more risk as they mature—putting more money into equities, alternative assets (like private equity) and junk bonds.

Public pension plans have also increased their allocation to risky asset classes as interest rates and bond yields have declined. Again, this does not make sense in theory. The expected return on both risk-free and risky assets should decline in tan-

dem. But a fall in ten-year Treasury-bond yields of five percentage points has been associated with a 15-point increase in public funds' allocation to risky assets.

The academics also look at the trustees, the people who make the investment decisions. They find a relationship between the riskiness of a fund's assets and the proportion of political trustees (such as state treasurers) and worker trustees elected by scheme members. Neither group will want to see contributions rise in the short term. So it makes sense that both groups bank on achieving higher investment returns, leaving any scheme shortfall to be cleared up later.

Some people might argue that this is all for the good. Pension schemes have long-term liabilities and thus should take more risks. If public funds take more risk and earn higher returns, that is saving both their employees and taxpayers money. Alas, the academics find that, even if you allow for their asset-allocation decisions, public pension funds underperform their benchmarks by more than half a percentage point a year. This underperformance is greatest in the alternative-asset categories such as private equity. Even if their asset allocation might have beaten a bond-only portfolio, the overall strategy isn't working. For example Calpers, the Californian state pension fund, has underperformed its targeted 7.5% return over the past 3, 5, 10 and 20 years.

The paper demonstrates convincingly that American accounting regulations have created perverse incentives for public pension funds. And that can mean only one thing. The rules need to change.

\* "Pension fund asset allocation and liability discount rates", March 2016

## Rolling the Dice

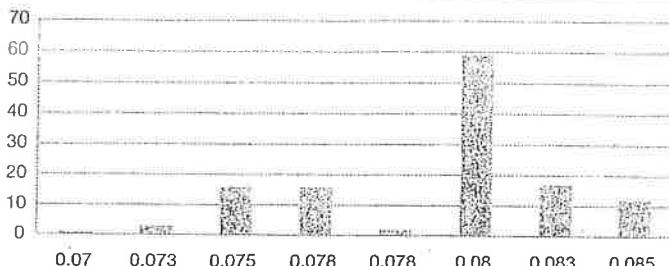
Investors grappling with lower interest rates have to take bigger risks if they want to equal returns of two decades ago.

### Estimates of what Investors needed to earn 7.5%



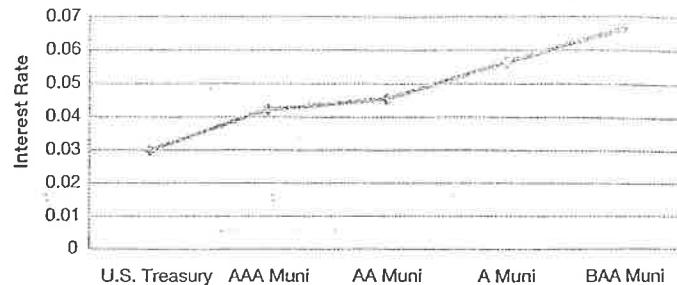
\* Likely amount by which returns could vary  
Source: Callan Associates

FIGURE 2: FREQUENCY DISTRIBUTION OF STATE DISCOUNT RATES



Source: National Association of State Retirement Administrators; National Council on Teacher Retirement; reprinted in Neumann and Corkery (2011)

FIGURE 1: CREDIT YIELD CURVE—U.S. GOVERNMENT VS. STATES



Source: Bloomberg Finance, L.P.

## Buttonwood |

### The huge shortfalls in pension plans

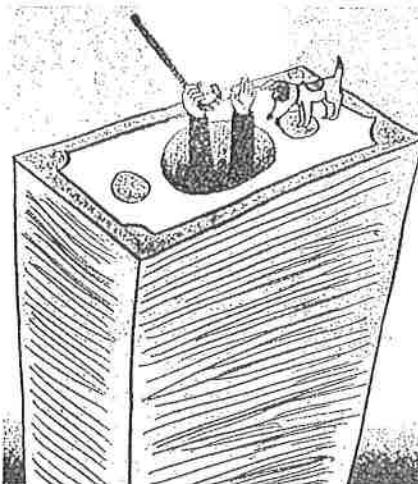
THE pension hole just keeps getting bigger. The assets owned by pension schemes have generally been falling in price while their liabilities have been relentlessly rising. One of the culprits is quantitative easing (QE), a tactic devised by central banks to revive the economy.

The numbers can boggle the mind. Mercer, a consultancy, reckons the hole in final-salary corporate plans in America was \$512 billion at the end of September, the highest figure since the second world war. The average corporate pension plan had a funding ratio (the proportion of liabilities covered by assets) of just 72%, down from 81% at the end of 2010. In Britain the Pension Protection Fund reported this week that the aggregate deficit of the schemes it insures stood at £196 billion (\$309 billion) at the end of September; the average funding ratio was 83%.

Those numbers look tiddly beside the public-sector pension deficits. In 2009 Joshua Rauh of the Kellogg School of Management at Northwestern University and Robert Novy-Marx, then at the University of Chicago's Booth School of Business, estimated that the deficit of American state and local-government pension plans was \$3.1 trillion. Mr Rauh reckons that the deficit is now \$4.4 trillion. In other words, a cool \$1.3 trillion has been added in two years.

These figures will not be accepted by everyone. Many states still discount their pension liabilities by the assumed rate of return on their assets, often around 8%. But this is a highly dubious assumption. Government bodies still have to pay the pensions, regardless of whether they achieve those returns or not.

Instead, some Warren Buffett-like principles ought to apply. If a promise to pay someone money in the future isn't a debt, what is it? And if a debt shouldn't be recorded at cost, how should it be record-



ed? A company might borrow \$50m in the bond markets to build a factory, after all, but it cannot record the debt on its balance-sheet at less than \$50m on the ground that it expects to earn a higher return from the factory than its cost of borrowing.

A public-sector employer could replace its pension plan by buying a promise of equivalent value in the markets and handing over the proceeds to its employees. Since pension promises are legally (and sometimes constitutionally) protected in many states, the equivalent promise is a government bond. That is why the government-bond yield is the appropriate measure for discounting public liabilities, as Messrs Rauh and Novy-Marx assert.

The Bank of England recognises this issue. Its employees are guaranteed an inflation-linked pension so it meets that promise by buying inflation-linked bonds. The current cost is 5.5% of payroll, far more than most employers put aside. Other employers are paying less into their funds and taking a gamble that the equity market will deliver the rest. In effect, they are handing

a guarantee of future stockmarket performance to their employees; something that would be very expensive to buy.

Oddly enough, the Bank of England has played its part in escalating the costs of other British pension schemes. The aim of QE is to lower bond yields. This raises the liabilities of pension funds (since it takes more money to deliver the same pension). The Pensions Corporation, an insurer, reckons the first round of QE increased the British pension hole by £74 billion. Regulations require that this hole be closed within ten years, costing companies £7.4 billion a year, money that could have gone into building factories and employing new workers. The National Association of Pension Funds has called for an emergency meeting with the regulator; the hope is that the contribution rules can be eased a bit.

These same issues apply to those on private and defined-contribution pensions. Struggling asset markets mean they build up a smaller pension pot; low bond yields mean the annuity income from that pot is lower. The result, according to a study by PricewaterhouseCoopers, a consultancy, is that Britons retiring today will end up with a pension income 30% lower than those retiring three years ago.

Workers approaching retirement should be saving more, not less, as a result of low rates. First, they will need to build up a larger pot to generate their desired income in retirement. Second, filling that pot will require more capital because investment returns will be lower.

It may be that, in aggregate, these side-effects of QE are outweighed by the relief brought to borrowers from lower rates. All the same it is an unfortunate piece of collateral damage, something the authorities have so far failed to address.

# Buttonwood

## The muddle-headed world of American public-pension accounting

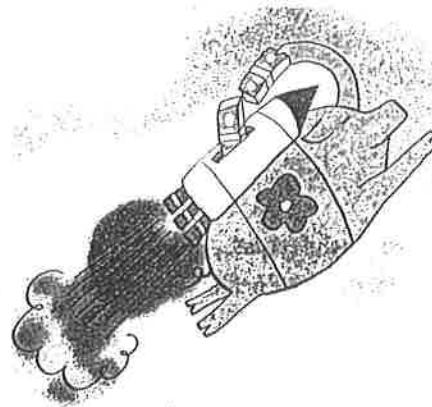
**S**LOWLY but surely the cost of America's public-sector pension promises is becoming clear. Last year the best estimate of the shortfall was more than \$4 trillion. To deal with its deficit, a giant Californian pension fund, CalPERS, recently announced plans that will increase contributions by employers (in effect, taxpay-ers) by up to a half, starting in 2015-16.

Final-salary pension costs have risen for decades because workers are living longer and the retirement age has barely budged. The bill was disguised in the 1980s and 1990s by good asset returns. But dismal equity markets have since forced many private providers to close final-salary schemes to new members and switch to less lavish defined-contribution plans.

This shift has hardly happened in the public sector, in large part because the accounting treatment is so different. Devin Nunes, a Republican congressman, recently revived a bill to move to a more conservative accounting approach.

Failing to recognise the true cost of public pensions builds up all sorts of problems, as an academic paper\* last year made clear. As pension funds become more mature (ie, more of their members are retired) their asset allocation should, in theory, become more conservative. After all, the fund has to worry more about paying benefits immediately and has less scope to gamble that riskier assets will deliver long-term growth.

Sure enough, mature pension funds in Canada and Europe and in America's private sector all follow this approach. But more mature American public plans have riskier portfolios than less mature equivalents. In its latest "Global Financial Stability Report" the IMF worried that American funds had increased the riskiness of their portfolios, "exposing them to greater volatility and liquidity risks".



The explanation for such behaviour is not hard to find. American public-sector schemes discount their liabilities by the expected return on their assets. The riskier the asset mix, the higher the assumed return—and the lower the bill appears to be.

This is an odd way of thinking. Suppose a car company borrowed \$10 billion in the form of a 20-year bond to build a manufacturing plant and planned to pay off the debt with the profits from running the plant. The car company will assume a higher return on capital than its financing cost (otherwise it should not build the plant). But it still has to recognise the \$10 billion bond liability on its balance-sheet. It cannot say it owes only \$2 billion because it expects a very high return.

The reason is clear. If the plant fails to earn a high return, the firm will still be liable to repay the bond. Similarly, if pension schemes fail to earn a high return on their assets, they still have to pay benefits. Final-salary pensions are a debt-like liability.

When private-sector companies account for their pension schemes, therefore, they discount liabilities with a corporate-bond yield. Lower yields have pushed up

liabilities and led to big deficits. Moody's, a ratings agency, will in future use a long-term bond yield to discount American public-pension schemes, resulting in much larger liabilities than before.

Even if you use the expected-return methodology, the discount rate used by public-sector pension funds should fall. That is because all pension funds tend to own some bonds, and low bond yields mean low future returns. But the paper finds no link at all between the discount rates used by public-sector funds and the level of bond yields. The motto seems to be: if reality is challenging, just ignore it.

The Governmental Accounting Standards Board (GASB) did change the rules for public pension funds last year. But the revised rules still throw up absurdities. In a paper\*\* for the *Financial Analysts Journal*, Robert Novy-Marx of the University of Rochester argues that by destroying assets invested in cash a scheme can reduce its deficit by increasing the expected return on remaining assets. "A plan can sometimes improve its funding status by literally burning money," he remarks.

This seemed such a startling finding that The Economist asked GASB to comment. Instead of a detailed rebuttal, we received this response: "GASB gave serious consideration to the views of Professor Novy-Marx when developing its new pension standards." Not serious enough, it seems. American taxpayers must not know whether to laugh or cry.

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\* "Pension Fund Asset Allocation and Liability Discount Rates: Camouflage and Reckless Risk Taking by US Public Plans?" by Aleksandar Andonov, Rob Bauer and Martijn Cremers, May 2012

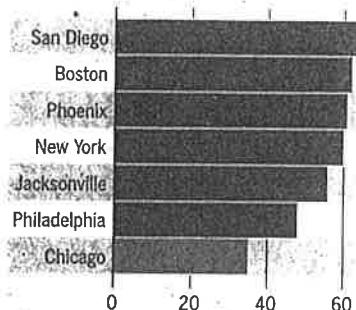
\*\* "Logical Implications of the GASB's Methodology for Valuing Pension Liabilities", by Robert Novy-Marx, *Financial Analysts Journal*, Volume 69, Number 1



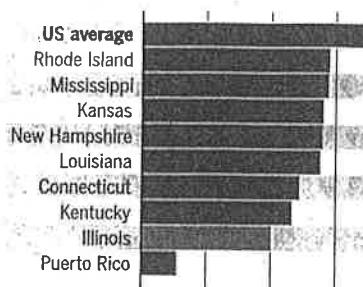
Rahm Emanuel,  
mayor of  
Chicago

### US pension plans

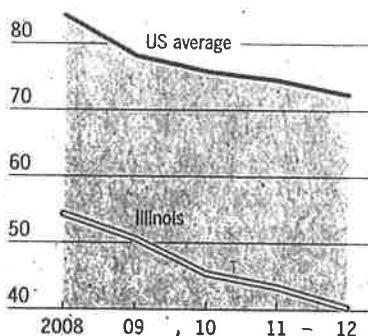
Worst funded among 25 most populous cities  
(funded ratio %), 2013



Worst funded states (funded ratio), 2012



Funded ratio



Source: Morningstar

## Law

### Legal challenges loom for reform efforts

Lawmakers bear the bulk of the blame when it comes to the sorry state of pension funds, writes Neil Munshi. More often than not, they failed on a multitude of fronts: overpromising generous benefits in return for public employees agreeing to take lower pay packages, succumbing to union lobbying for ever-more generous benefits, and skimping on government contributions for years on end.

It is no small task, however, when they finally muster the courage to reform their systems. The political risks are high, since the challenge often involves raising taxes and cutting benefits. And, as many US states have found, cutting benefits opens the door for serious legal challenges that can delay reforms for years.

Most states protect pensions under the contract clause of the US

constitution, or a similar state provision, which prohibits lawmakers from passing any law that impairs existing private or public contracts, according to Boston College's Center for Retirement Research. Seven US states – including Illinois, Michigan and New York – have explicit constitutional protections of public employee benefits.

In Illinois, the state constitution says pension benefits are contracts that "shall not be diminished or impaired". Union leaders have cited this in their legal efforts to challenge the new reform.

Michigan's constitution has similar language. But Judge Steven Rhodes, in his ruling deeming Detroit eligible for bankruptcy earlier this month, said the constitution did not offer pensioners any special protections over other creditors. Nevertheless, the unions

involved have vowed to fight on.

Labour groups take some solace from a 2012 decision in Arizona, where a judge ruled that a reform that would have increased employee contributions violated the state constitution's protections against the impairment of contracts between the state and its employees.

"Their retirement benefits were a valuable part of the consideration offered by their employers upon which the teachers relied when accepting employment," Judge Eileen Willett, of the Maricopa County superior court, wrote in her opinion.

The case ended up in the state supreme court, which heard oral arguments last summer but has yet to issue a ruling – two-and-a-half years after the reform passed through the legislature.

# US public pensions crisis 'is really hard to fix'

Huge problem of underfunding of retirement plans is crippling many cities and states, writes *Attracta Mooney*

**E**ighteen months after Rahm Emanuel, a former White House chief of staff, became mayor of Chicago, he addressed a news conference about his priorities.

"[Number] one is retirement security and pension reform so we can give taxpayers and the public employees retirement security, which is something we can't say today," the mayor said in November 2012.

In the following three and a half years, Chicago's public pension system, which estimates suggest has a funding hole of between \$20bn and \$32.5bn, has cast a long shadow over the mayor.

There have been rows with unions, court battles and finally a credit downgrade for the city, all linked to the Chicago's public pensions.

Similar stories are playing out across the US. Although the funding deficits might not be as extreme as in Chicago, many cities and states are struggling under the weight of their pension plans, which oversee the retirement incomes of current and past public sector employees.

The scale of this pension crisis, as it has been dubbed, is huge. The Hoover Institution, a think-tank at Stanford University, estimates that US public pensions collectively have a \$3.4tn funding hole. More conservative numbers put the funding gap at around \$1tn.

Few public pension plans are fully funded, meaning they do not have enough money to pay current and future retirees. And the situation is getting worse.

According to Wilshire Consulting, an investment advisory company, state-sponsored pension plans in the US had just 73 per cent of the assets they needed in mid-2015, down from 77 per cent in 2014. Turbulent market conditions in the latter part of 2015 and early 2016 probably made this number even worse.

The big questions are if and how the large funding holes that have emerged in the US public pension system can be fixed.

Chris Tobe, an investment consultant and author of *Kentucky Fried Pensions*, a book examining problems in Kentucky's retirement system, says the shortfalls in most US public pension plans are fixable, but there are exceptions, such as Chicago.

However, fixing the schemes will require a lot of work and is likely to have unpleasant consequences for retirees, employees, taxpayers and politicians.

One area where this is apparent is when state and local governments increase or introduce taxes, using the money raised to plug pension shortfalls. Several cities, including Chicago and Philadelphia, have taken this route.

But higher taxes or the issuance of bonds, another option used by local governments to raise money in order to reduce pension deficits, often proves unpopular with taxpayers.

Tamara Burden, principal at Milliman Financial Risk Management, an investment adviser to pension funds, says: "Raising taxes and issuing bonds means a vote, and a lot of public entities have seen those initiatives not pass."

"[The large-scale underfunding of public pensions] is really hard to fix."

In Chicago, Ed Bachrach, chairman of the Center for Pension Integrity, a non-profit organisation, estimates that to ensure the city's pension plans are fully funded within 20 years, Chicago's property tax would have to be increased 85 per cent. But he warns that "crippling tax increases" could drive taxpayers and businesses away.

Mr Bachrach adds: "In troubled jurisdictions, officials cannot raise taxes fast enough to prevent the erosion of fund assets, and the enormous pension payments required are crowding out expenditure for vital public services and crumbling infrastructure."

There are other options available to improve the outlook for public pension plans. One is making changes within pension funds that would help to drive funding deficits down, such as cutting the fees retirement plans pay to asset managers. Some pensions are pushing into riskier assets in the hope that this will increase returns.

Alternatively, state and local governments could reduce benefits for current or future retirees, or cap the maximum retirement benefit that can be paid to an individual. These measures are illegal in some states and have proved unpopular with unions and public sector workers.

Public sector workers could also be forced to increase their contributions, or move into defined contribution plans, which do not guarantee a level of income on retirement. This would, in turn, reduce the strain on local government budgets.

Any attempt to fix the pension shortfall is likely to involve a combination of these solutions. But there seems to be an unwillingness to fix the problems, according to Olivia Mitchell, a professor at the Wharton School at the University of Pennsylvania.

Unions, public sector employees and retirees do not want to give up the benefits promised to them, politicians do not want to impose tax hikes that could cost them votes, and taxpayers are reluctant to part with more cash to prop up the system.

Ms Mitchell says: "Politicians and taxpayers have shown themselves unwilling to take their public pension shortfalls seriously."

Mr Bachrach adds: "Fixing this problem requires shared sacrifice from all parties: public employees, retirees and taxpayers. It requires courage on the part of elected officials."

If the problems are not fixed, the consequences could be dire.

Some pension funds, including two of Chicago's plans, are on course to run out of money within a matter of years. This means that either the retirees will not get paid the money they are owed, or, more likely, the cities and states that back the pension plans will have to cover the retirement payments.

This would leave cities and states with less money to spend on services such as education. In some cases, cities may go bankrupt. This has already happened in Detroit in Michigan and San Bernardino in California, where large public pension shortfalls contributed to the cities' defaults.

"I do believe that US cities and towns will continue to suffer [because of their pension funding holes], and there will be additional bankruptcies following the examples of Detroit," said Ms Mitchell earlier this year.

Some pension officials are hoping the federal government will step in and prop up problematic retirement funds. But Devin Nunes, a US Republican congressman, is trying to make sure this does not happen.

Another factor is that public pension plans have been underestimating how much money they would need in future, says Ms Mitchell.

He proposed a bill in March to ensure the federal government cannot rescue insolvent public pension funds. "Cities and states should run [pension funds] in a financially sustainable way. That is what my bill encourages, particularly by prohibiting federal bailouts of distressed funds," he says.

Even without the bill, Steven Hess, an analyst at Moody's, the rating agency, says states and cities will have to fix their own pension problems. "We don't think the federal government will come to the rescue of municipal plans," he says.

Phil Angelides, a former state treasurer for California who used to sit on the board of Calpers and Calstrs, the US public pension schemes, says: "[The public pension deficit] is manageable if society begins to address it. A few pension funds may have immediate issues, but they face long-term challenges and there is still time to address them."

As for Chicago, the future of its pension funds remains unclear. In March, Illinois's Supreme Court ruled against Mr Emanuel's plans to stabilise the pension funds by requiring larger employee contributions and cutting pension benefits in return for bigger contributions from the city.

In the wake of this ruling, a spokesperson for the mayor says: "We are currently evaluating a number of pension reform proposals."

The mayor, it seems, faces an uphill battle to plug the city's pension deficit.

## US public pensions There is no young blood coming in'

The large funding holes that have emerged at US public pension plans have been decades in the making.

A combination of factors, ranging from demographics to current low interest rates, has left pension plans nursing big deficits.

In some cases, cities and state governments have not contributed as much as they should have to public pension plans, leaving funds without the money they needed to invest and plug any developing funding holes.

Some pension officials are hoping the federal government will step in and prop up problematic retirement funds. But Devin Nunes, a US Republican congressman, is trying to make sure this does not happen.

Another factor is that public pension plans have been underestimating how much money they would need in future, says Ms Mitchell.

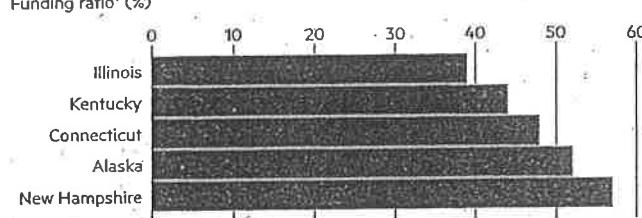
Olivia Mitchell, a professor at the Wharton School at the University of Pennsylvania.

Public plans typically have high return targets of between 7 and 8 per cent, which are used to forecast how much money a pension fund will need to pay current and future retirees. Private sector pension plans, in contrast, typically use lower rates of 2.5 per cent on average to calculate future liabilities, says Ms Mitchell.

Every time a public pension plan misses the return target, their liabilities jump. They then need far stronger performance the following year in order to correct the problem.

An ageing public sector population is not helping matters. "There is no young blood coming in to keep their plans going," says Ms Mitchell.

Public pension plans under pressure  
Funding ratio (%)



\*Measure of a pension scheme's assets versus liabilities  
Source: Pew Charitable Trusts

\$3.4tn  
Size of the collective funding hole in US public pensions, according to The Hoover Institution

\$20bn to \$32.5b  
Estimated size of the funding hole in Chicago's public pension system

85%

Increase in Chicago's property tax needed to ensure the city's pension plans are fully funded within 20 years

## Chicago Isn't Moody's Kind of Town

WSJ, 6/19/15

By TIMOTHY W. MARTIN  
AND MARK PETERS

CHICAGO—More than a year before Moody's Investors Service downgraded Chicago's bonds to junk status, one of its senior analysts asked top city officials to explain why the third-largest U.S. city was healthier than a troubled island commonwealth flirting with insolvency, according to people familiar with the conversation.

"Help me understand why Chicago is different than Puerto Rico?" said the Moody's analyst, Rachel Cortez, during a February 2014 meeting that Mayor Rahm Emanuel attended, two of these people said. A spokesman for Moody's and Ms. Cortez said the firm doesn't discuss "private meetings with issuers or other capital-market participants."

The exchange inside City Hall came to embody a more aggressive stance by the world's second-largest ratings firm as Moody's cut Chicago's credit rating by seven notches over a two-year period. City officials were taken aback by the Puerto Rico comment and then angered by Moody's final move to junk in May 2015, a stance that differed from more optimistic conclusions made by other ratings firms. Since last summer, the city has left the Moody's Corp. unit off four bond deals.

Mr. Emanuel through a spokeswoman declined an interview request. He has described Moody's downgrade of Chicago's bonds to junk as irresponsible and premature, accusing the firm of playing politics.

Tim Blake, a Moody's managing director who heads its public pension task force, said the firm is "rationally applying" its ratings models. "Our job is to make judgments on credit risk as we see it," Mr. Blake said, noting some issuers with improved pension situations have been upgraded.

Other cities and counties from California to Florida are reconsidering their relationship with Moody's as it expands its stricter ratings approach around the U.S., threatening a seal of approval

Please see CHICAGO page C2

that for decades was all but a necessity in the municipal-bond world.

Santa Clara County, Calif., omitted Moody's from its past two deals because of the firm's disagreement over how some property-tax revenues were to be distributed. "We became convinced that Moody's was not being responsible and so therefore we moved away from them," said Jeff Smith, who oversees the operations of the county, which includes San Jose. "We don't think it has had, or will have, any effect on our ability to sell bonds."

The latest government to back away from Moody's is Miami-Dade County, which last week decided to hire Kroll Bond Rating Agency Inc. instead of Moody's for its \$534 million sale of airport bonds. Kroll's rating is two notches higher than Moody's.

"We wanted a fresh set of eyes," said Anne Lee, chief financial officer of the Miami-Dade aviation department, of the decision to not hire Moody's, which she adds charges "30% to 40%" more than rivals.

A Moody's spokesman declined to comment.

Moody's metamorphosis began after the 2008 crisis as ratings firms drew criticism in Congress and from regulators for their rosy grades on mortgage bonds that went sour. For local governments, the key change came in 2013 when Moody's decided it would no longer rely on cities' and states' targets for investment returns when it calculates pension liabilities—one of the biggest costs shouldered by local governments. Moody's own estimates are more conservative, meaning holes in pension funds look bigger.

As Moody's adopted the stricter ratings methodology, it diverged from rivals Standard & Poor's Ratings Services and Fitch Ratings in its assessment of problems facing local governments across the U.S. From 2002 to 2007, Moody's and S&P upgraded issuers at about the same rate. But from 2008 to 2014, S&P had seven upgrades for every one of Moody's, according to a recent Nuveen Asset Management LLC report.

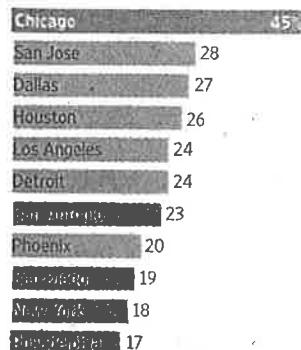
Horacio Aldrete, who leads S&P's U.S. local government group, said the firm's ratings methodologies reflect the low default levels among state and local governments in recent years. "Our view is that credit quality is generally strong, a position that has been borne out in recent years," Mr. Aldrete said.

Fitch said it maintains "a relatively balanced view on U.S. municipal credit and that often places us somewhere in between" other ratings firms, said Dan Champeau, a managing director in its U.S. public finance group.

Nowhere did the Moody's shift lead to a more public drama than in Chicago, where top city offi-

### Chicago Blues

Debt and pension payments as a percentage of revenue



Source: Fiscal year 2013 financial reports for each city compiled by Nuveen Asset Management  
THE WALL STREET JOURNAL

cials including Mr. Emanuel attempted to sway Moody's even as the firm increasingly came to see the city as an outlier with a shrinking number of options to avert a full-blown fiscal crisis.

Moody's suggested that Mr. Emanuel should be more open to tax increases as part of plans to confront one of the nation's deepest municipal pension shortfalls, according to people familiar with the matter, and the mayor made public comments supporting such a move. He eventually proposed a pension overhaul that included a property-tax increase of \$250 million over five years.

The city's efforts to convince Moody's didn't slow a series of downgrades that began with a three-notch swoop in July 2013,

following the change to its methodology for pension liabilities.

Mr. Emanuel pushed the city's finance department and other senior officials, people familiar with the matter said, to figure out a fix even as frustration mounted at City Hall that Moody's didn't maintain consistent standards, the people said. In January 2014, Moody's made additional changes to its methodology that increased the importance of debt and pensions and de-emphasized other economic factors, undercutting a city argument about the strength of Chicago's economy.

In March 2014, a team of Chicago officials flew to New York without Mr. Emanuel for a meeting at Moody's Manhattan offices. In a conference room overlooking construction at the former site of the World Trade Center, the Chicagoans outlined the plan to address the city's \$20 billion pension hole, plus alternative approaches and funding plans if Mr. Emanuel's overhaul was struck down by the courts in the years ahead, the people said.

But Moody's analysts didn't give a strong reaction one way or the other as to whether they were swayed by the city's plan, the people said.

The saga has left some city officials wondering whether Moody's has overstepped its bounds with Chicago. "It is one thing to point out the current financial situation. It is another to give political advice," said Alderman Patrick O'Connor, a city council ally of the mayor.

## Illinois Legislature sends Chicago pension fund bill to governor again



Daniel Acker/Bloomberg

Illinois Gov. Bruce Rauner has called the Chicago pension funding plan another "kick-the-can" approach to pension funding."

The Illinois Legislature approved a bill to improve funding at Chicago's municipal and laborer pension plans that mirrors the one vetoed by Gov. Bruce Rauner in March. Meaghan Kilroy

The Illinois Legislature approved a bill to improve funding at Chicago's municipal and laborer pension plans that mirrors the one vetoed by Gov. Bruce Rauner in March.

The House voted 63-45 in favor of the measure Thursday.

The bill, which passed the Senate on Jan. 25 in a new congressional session, is intended to improve the pension plans' funding ratios to 90% each by 2057 through higher contributions for certain employees and increased city contributions.

The bill requires that Chicago begin making contributions on an actuarial basis to both pension funds in 2023.

It also raises payroll contributions for participants of both pension funds hired after Jan. 1, 2017, to 11.5% from 8.5%, and reduces their age of eligibility for full benefits to 65 from 67. Employees hired on or after Jan. 1, 2011, will have had the option of increasing their payroll contributions to 11.5% from 8.5% in return for their retirement age being reduced to 65 from 67. Employees hired prior to 2011 are not affected.

Since the earlier vetoed bill was passed by a lame-duck Legislature in January, without an opportunity to vote on overriding the veto, lawmakers needed to introduce a new bill for their second attempt. In a news release following his March veto, Mr. Rauner called the city pension funding plan another "kick-the-can approach to pension funding" and stressed that more "comprehensive, long-term pension reform" for the state was needed. Representatives for Mr. Rauner on Friday referred to his comments in March.

The \$4.3 billion Chicago Municipal Employees' Annuity & Benefit Fund had \$18.6 billion in liabilities as of Dec. 31, 2015, for a funding ratio of 24.7%. The \$1.2 billion Chicago Laborers' Annuity & Benefit Fund has a funding ratio of roughly 45%.

Illinois' five state retirement systems face roughly \$130 billion in combined unfunded pension liabilities combined.

## Pensions

# No love, actuary

A report on American pension funds is controversially shelved

WHEN it comes to funding the pensions of their workers, American states and local governments have not been doing a good job. Back in 2000, the average pension plan was fully funded, according to the Centre for Retirement Research (CRR); at the end of 2015, the official funding ratio was just 72%.

So a report from a pension-finance task force into the way economic principles apply to public pension funds ought to make compulsory reading. But the paper, commissioned by the American Academy of Actuaries (AAA) and the Society of Actuaries (soA), is not going to see the light of day. That is very disappointing, since the report (a draft of which has been seen by *The Economist*) highlights how the approach to valuing American public pensions is highly questionable.

The big costs for pension plans lie in the future, as members retire and benefits are paid. Those costs must be discounted at some rate to the present day so those who run schemes know how much money to put aside. The higher the discount rate, the less money has to be put aside now; American public plans tend to use a discount rate of around 7.5%, based on the investment return they expect to achieve.

The draft paper points out that this approach is flawed. Indeed, accounting rules don't allow corporate pension plans to use it. Economic principles suggest that the cost of a benefit does not depend on the assets expected to finance it. A promise to pay a stream of pension payments in the future resembles a commitment to make interest payments on a bond. A bond yield is thus the most appropriate discount rate. But given how low bond yields are, pension deficits would look larger (and required contributions would be much higher) if such a discount rate were used. A discount rate of 4%, for example, would mean the average public pension plan would have a funding ratio of only 45%, not 72%, according to the CRR.

A more generous accounting approach allows public pension plans to avoid asking taxpayers to stump up more money in the short term. But future taxpayers will bear the burden. As the paper points out, the concept of intergenerational equity requires each generation of taxpayers to pay the full cost of the benefits it receives.

The ideas in the paper have been circulating among European actuaries for 20 years. But the conclusions are controver-

sial in America; an AAA spokesman said the study "did not meet the editorial and policy standards of our review process". Pressed for details, the AAA referred to the paper's "tone and clarity" and cited the wording of a footnote on pension costs.

It was perfectly within the rights of the actuarial bodies not to publish but they went further. In a memo, Tom Wildsmith and Craig Reynolds, respectively presidents of the AAA and soA, said that, as the paper was produced by a group set up by them, "we do not think it would be appropriate for members of the task force, as individuals, to take the existing paper and simply publish it somewhere else."

The decision angered those who have been working on the paper since 2014, who see the move as censorship. "This is a paper that they didn't write, they didn't fund and don't want to publish," says Ed Bartholomew, a former banker and one of the authors who worked on a voluntary basis. Jeremy Gold, another of the authors, says the affair illustrates the insularity of the actuarial profession.

In its defence, the AAA says it has in the past published similar views to those expressed in the report. And the soA plans to hold a webinar on September 27th, in which the authors can discuss the issue. Still, the two bodies should just allow the report to be published. American public-sector pension deficits are more than \$1 trillion, even on the most generous assumptions. This is an issue in which debate should not be stifled. ■

## Buttonwood | Betraying the promise

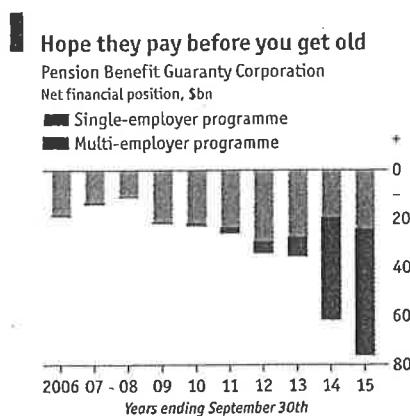
America's Congress has allowed a pension-insurance scheme to become dangerously underfunded

MANY workers depend on their employers for their retirement income. But, for defined-benefit schemes, this is an explicit bet that their employer will still be around several decades later: quite a gamble. So governments in Britain and America have set up insurance schemes designed to protect workers against the risk that their companies go bust. These bodies, Britain's Pension Protection Fund (PPF) and America's Pension Benefit Guaranty Corporation (PBGC), are funded by levies on employers.

Now that Tata Steel's loss-making British operations are up for sale, the chances are that the company's pension fund will end up in the PPF's clutches before too long. Buyers are likely to cherry-pick the steel company's assets, which may leave the scheme without a viable sponsor—contributions into the fund were £155m (\$219m) in the most recent financial year. And because the scheme is a legacy of the old nationalised British Steel, it is huge, relative to the existing business: its assets are almost £14 billion compared with annual turnover of just £8.1 billion at Tata Steel's European operations.

Fortunately, the scheme is pretty well-funded, thanks to a policy of buying inflation-linked government bonds to match its liabilities closely. As of March 2015 it had a deficit of £485m (or 3% of assets). That would still be a lot for a private buyer to agree to fund. But it is not that big a burden for the PPF, which had a surplus of £3.6 billion at the time of its last report.

Things don't look quite as healthy over at the PBGC, which has been around for much longer. As of its 2015 report it had total assets of \$87.7 billion and liabilities of \$164 billion—a deficit of \$76.3 billion, a record (see chart). The big problem is the multi-employer bit of the PBGC's responsibilities, where the deficit is \$52.3 billion.



Multi-employer schemes cover industries such as mining and trucking, in which a number of companies contribute to a collective pot. As the industry shrinks and individual employers go bust, the financial position of such schemes deteriorates. They end up in the arms of the PBGC when they run out of money to pay benefits (normally, when a single company goes out of business, there are enough assets to cover most of the liabilities). So when a multi-employer failure occurs, the PBGC's liability is accordingly huge. It makes provision on its balance-sheet for funds that it expects to run dry over the next decade. But Congress has provided for the PBGC to get a levy of only \$27 per employee per year. That adds up to an annual payment of around \$270m, woefully inadequate to cover a \$52 billion liability.

On March 31st the PBGC warned that it will require significantly higher premiums to keep its multi-employer scheme running. And last year it said, with respect to the scheme, that "the risk of insolvency rises over time, to exceed 50% in 2025." It added that the risk increases to more than 90% within 20 years. "When the pro-

gramme becomes insolvent, PBGC will be unable to provide financial assistance to pay guaranteed benefits in insolvent plans," it concluded.

The PPF is in a much stronger financial position because it has been better funded. But the fundamental problem for such insurance schemes is the changing nature of industry and of the type of pensions promised by employers. Defined-benefit promises, where the pension is linked to a worker's final salary, are the most expensive for companies to fund. They were the norm in the 1960s and 1970s when developed economies had a much bigger focus on heavy (and unionised) industry. Those sectors have now shrunk in size but they still must bear the legacy cost of the pensions promised to former workers. British Steel's pension fund has fewer than 17,000 working members but more than 86,000 claiming retirement benefits.

Meanwhile, the businesses that have emerged in the past 20 years have tended to be non-unionised and to offer defined-contribution pensions, in which retirement income is not guaranteed by the employer. Such schemes are not part of the PBGC or the PPF; there is no promise for an insurance scheme to back. So there are no new companies to pay the levy; an ever-smaller number of employers are funding a huge historic liability.

Congress needs to pull its finger out. The PBGC can hardly cut benefits any further: a worker with 30 years' service in a multi-employer scheme will get less than \$13,000 a year, with no inflation protection. If Congress doesn't want to charge employers more, it should fund the PBGC directly. Setting up an insurance scheme, and then failing to fund it adequately, is a betrayal of its constituents.

# Pension body raises risk level

FT, Feb 19, 2008

PBGC seeks to avoid taxpayer bail-out

Dramatic turn towards assets such as equities

By Norma Cohen In London  
and Anuj Gangahar In New York

A government-sponsored body that insures the pensions of 44m Americans is to increase dramatically its investments in risky assets such as equities and real estate as it tries to avoid a taxpayer bail-out.

The announcement by the Pension Benefit Guaranty Corporation, which has a \$14bn deficit, was made on the President's Day public holiday yesterday. The corporation will roughly double its investment in equities, to 45 per cent of total assets.

It is a big shift for the corpora-

tion, which has previously sought to minimise risk by putting most of its investments into safer but lower-yielding bonds rather than equities.

Charles Millard, director of the PBGC, said the plan offered a much higher chance that the insurance fund would raise enough cash to meet its commitments without having to ask employers for higher contributions or taxpayers for a bail-out.

The equity portion of the corporation's investments returned 16.5 per cent last year while the fixed-income portion returned just 3.4 per cent.

A review showed that a diversified portfolio would have outperformed the current asset mix 98 per cent of the time.

Mr. Millard agreed that if the PBGC was unable to tackle its deficit by raising additional funds from investment, employ-

ers or taxpayers, its remaining option would be slashing retirement benefits, which would be politically unacceptable.

"The purpose of this investment strategy is to avoid a taxpayer bail-out," Mr. Millard said. The new strategy was actually less risky because investments would be spread among a wider variety of asset classes, he said.

It offered nearly a 60 per cent chance that the PBGC would be fully funded in 10 years, while

The whole problem is that we are underfunded. We are chronically underfunded'

Charles Millard  
Director of the PBGC

the previous one offered only a 20 per cent chance.

"The whole problem is that we are underfunded. We are chronically underfunded," Mr. Millard said.

But the move underscores grim choices facing the PBGC, an agency under fire from both political parties as it tries to shore up its weakened finances.

The PBGC had been attacked in the past for taking investment risk and changed its strategy to focus more heavily on bonds that move with pension liabilities in 2005.

Although the agency was created by government, it is not backed by it and relies on insurance premiums paid by the companies whose plans it insures and the investment returns those premiums earn.

It currently pays benefits to more than 700,000 retirees. Legis-

lation that would have forced companies to fund their schemes more fully – and limited PBGC losses – failed in 2005. Another overhaul adopted in 2006 improved some safeguards but failed to ensure full funding.

President George W. Bush has announced a proposal that would allow the PBGC to increase some premiums from 2009.

The PBGC holds assets from schemes as it takes them over from insolvent employers.

It held 28 per cent in equities at the end of last year.

The PBGC will also allocate 45 per cent to a diversified set of fixed-income assets, down from about 72 per cent at the end of 2007. It will allocate 10 per cent to alternative investments including hedge funds.

The PBGC has approximately \$55bn to put into the new investment policy.

## Pensions still oblivious to bond wisdom



Edward Chancellor

The first rule of financial prudence is that assets and liabilities should be matched. Unfortunately, during good times this rule tends to be forgotten. There's normally a profit to be made by borrowing in a low-yielding currency and lending in another at a higher rate; or by borrowing short and lending long. The mismatching of assets and liabilities lies at the heart of the current credit crisis. In recent months, many have discovered the perils involved in the pursuit of such easy gains. Only the pension world remains oblivious.

The value of pension liabilities have the characteristics of a

fixed-income debt. The sponsor of a defined benefit plan is obliged to pay out a (more or less known) sum at a certain date in the future. The present value of that liability can be discounted back to the present and matched by purchasing a fixed-income security. This is all standard finance theory. But those who run corporate pensions prefer to ignore these findings.

Such pensions generally own large amounts of equities. In effect, they are playing a carry trade of their own: going short bonds and long stocks.

True, there have been some exceptions. In 2001, the pension fund of Boots, the UK drug store chain, disposed of its equity holdings and piled into bonds. The timing was fortunate as the stock market tanked shortly after. A few years later, the Pension Benefit Guaranty Corporation went down a similar path. The PBGC, the US federal agency charged with insuring corporate

pension plans and paying out benefits to former employees of busted firms, announced in January 2004 that it was reducing its allocation to equities and investing the proceeds in fixed-income securities.

At the time, the PBGC justified its decision on the grounds that its liabilities "were bond-like in nature". Besides, the PBGC claimed it was already heavily exposed to the stock market, "because the pension plans insured by the agency remain heavily invested in equities". The reasoning behind this decision was impeccable, but its timing was less favourable since the stock market remained in bullish mode for the following three years.

Now the PBGC has had a change of heart. Last month, the agency announced it would reduce its bond holdings and buy more stocks. It says this new asset allocation provides greater diversification and that it can afford to take on higher

volatility for higher returns. Not only is this justification weak but the timing of this about-turn could turn out to be poor. Corporate profit margins around the world have recently been at record highs. Given that profits are mean-reverting, it's likely that future equity

The risk of the fund should be neutralised by selling stocks and investing in bonds

returns will be well below their historic average.

The best explanation for the PBGC's decision is provided by a report by David Miles of Morgan Stanley (*Optimal Portfolio Allocation for Corporate Pension Funds*, November 2007). Miles cleverly models the moral hazard that comes from insuring pension obligations. He argues pensions should invest more in equities

when they need to make up a deficit and have a strong sponsor standing behind them. The PBGC is severely under-funded and believes it has a good chance of making up the shortfall by investing in stocks.

Although the US government is not legally bound to bail out the PBGC if it goes bust, the prospect of hundreds of thousands of angry pensioners virtually guarantees it will do so. Like the weak Savings & Loans associations in the 1980s, whose deposits were guaranteed by taxpayers, the PBGC has an incentive to go for broke.

But this doesn't explain why most corporate pension plans, which aren't in deficit, remain so devoted to equities. The late Fischer Black, the father of options theory, argued against their being so. By investing in stocks, the corporate pension plan increases the leverage of the plan sponsor, boosting its value during a bull market but hurting the stock in a bear market. He argued the risk

of the pension fund should be neutralised by selling stocks and investing the proceeds in bonds. If the firm wanted to maintain the same degree of leverage, it should issue bonds and buy back its own stock.

The beauty of Black's proposal is that the interest payments on the company's bonds are tax-deductible. So the leverage of the company would be unchanged but its cash flow would rise.

"Almost every corporate pension fund," Black concluded, "should be entirely in fixed-income investments." It's remains a mystery why more CFOs haven't responded to Black's brilliant proposal.

Perhaps it will take another bear market for them to see the light. In the meantime, corporate America remains over-exposed to equities in its pension funds while the government-sponsored pension insurer is following the same misguided path.

Edward Chancellor is a member of GMO's asset allocation team

Jan 30, 2014

# Big pension funds shift from stocks to bonds

## News analysis

**Reverse Rotation undermines belief that this year will see a debt market collapse like 1994's, says David Oakley**

After the Great Rotation comes the Reverse Rotation. At least, that is how it looks. Big pension funds are switching out of equities into bonds, in a sharp reversal of last year's trend when stock-hungry investors powered a rally in shares.

The move has undermined the thesis that 2014 could prove to be a repeat of 1994, when bond markets collapsed in response to sharp interest rate rises, say some investors.

In short, the bond vigilantes behind 1994's bond market rout appear unlikely to return. Indeed, the big equity gains of 2013 have spurred pension funds to lock in profits and "de-risk" with a greater weighting in bonds to make their portfolios safer.

Turbulence in emerging markets, fears over China's growth, volatility in the Turkish lira and a nosedive in the Argentine peso, has boosted bond markets, too. The haven attractions of sovereign debt have led to a modest recovery in US Treasuries and UK Gilts.

Alan Wilde, head of fixed income and currency at Barings, says: "We thought this was going to be the year of equities. But bonds are not doing too badly. It's certainly not going to be 1994 again."

In 1994 emerging markets suffered most as interest

rates moved swiftly higher in the US, UK and other industrialised economies. This time the troubles in the developing world again look serious - and this is before there has been a single rate rise in the developed world.

Schroders, Europe's second-biggest listed asset management group, this week announced it was moving a large chunk of equities in its pension fund into fixed income.

Alan Brown, a trustee of the Schroders pension scheme, says: "The improvement in equities has given us the opportunity to reduce risk. It makes sense to do this now, rather than later."

Two other big pension funds, one in the UK and one in North America, are looking at a similar switch from equities to bonds, with volatility in emerging markets likely to hasten a move.

Like the Schroders' pension scheme, these two groups have funding ratios that are more than 100 per cent, which means they have more than enough assets to meet their liabilities at current valuations.

This gives them the luxury of opting for less risky bonds as they do not require the punch of equities to give them higher returns.

However, is it time to cash out of equities? Some investors and strategists say no.

HSBC, for example, is this year forecasting a 4 per cent rise in Wall Street's benchmark S&P 500, a 10 per cent rise in the UK's FTSE 100 index and a 14 per cent rise in the pan-European Eurofirst 300.

The FTSE 100 is expected to break through its Decem-

ber 30 1999 peak to a record high for the new millennium.

Robert Parkes, an equity strategist for HSBC, says: "It is not necessarily time to lock in profits from equities."

"Some cautious funds may choose to do that, but we think these equity markets have plenty more scope to push higher."

Economic recovery and stronger corporate earnings are likely to provide further fuel for gains in stocks, Mr Parkes adds.

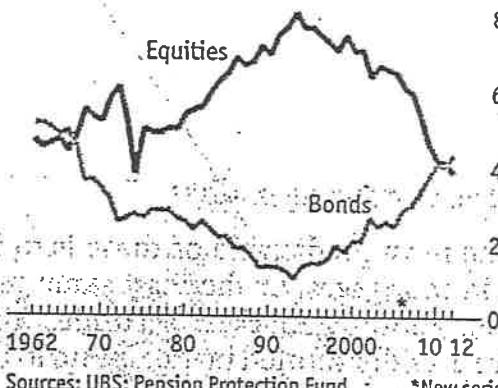
As equities rise, bonds are likely to struggle. US and UK government benchmark 10-year bond yields, which have an inverse relationship with prices, are forecast by some investors to increase by a full percentage point by the end of the year.

Bond Vigilantes, says: "We

The Economist December 1st 2012

## The big switch

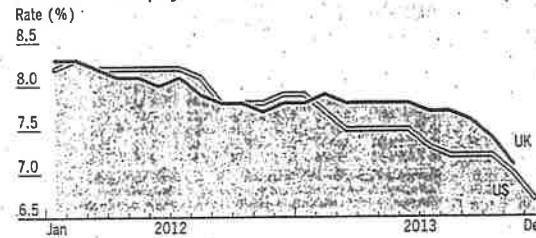
Britain's pension funds, average asset allocation  
% of total



Sources: UBS; Pension Protection Fund

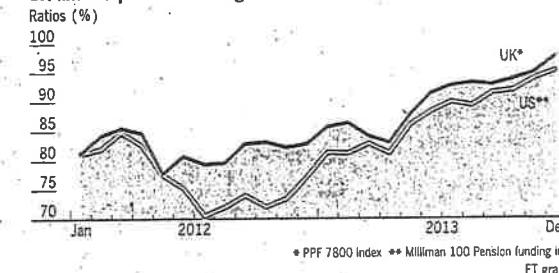
\*New series

## UK and US unemployment



Sources: Thomson Reuters Datastream; Pensions Protection Fund; Milliman

## UK and US pension funding



\*PPF 7800 Index \*\*Milliman 100 Pension funding index

FT graphic

over deflation, or a sustained period of falling prices - with the European Central Bank expected to loosen monetary policy further - are helping to underpin bonds. This will keep the bond vigilantes in check.

If the Reverse Rotation out of equities into bonds does happen, it is more likely to be a gentle spin, says Mr Leaviss.

Bond Vigilantes, says: "We have seen a big part of the bond sell-off already, and government debt is getting close to fair value."

Mr Leaviss cites the lack of wage and inflationary pressure in the US and UK, which propelled the steep interest rate rises of 20 years ago.

Jim Leaviss, head of retail fixed income at M&G Investments who has created his own website called

# Switch to bonds signals end for cult of equity

## News analysis

Some managers say shift from stocks is a symptom of pension funds maturing, writes David Oakley

It is a once in a generation moment. For the first time in more than 50 years UK pension funds are holding more bonds than equities.

Some fund managers have called it the death of the "cult of equity" and say it is part of the most significant market allocation trend since the 1950s. The shift to bonds has huge implications for the performance of pension funds and those that manage money for them.

The trend is not limited to the UK. In the US, Europe and Asia, some of the biggest pension funds and asset allocators have been switching into fixed income.

For example, Allianz, the world's second biggest manager of money with about €1.7tn under management, has only 6 per cent of its insurance portfolio in equities, while 91 per cent is in bonds. A decade ago, 20 per cent was in equities.

A pension trustee at a big UK fund says: "We have been switching into fixed income for the past 10 years because of a number of reasons. Since 2002, there have been two stock market crashes, which have shaken equities and makes it difficult for funds like ourselves to deal with the volatility."

"We need stable, fixed

returns to match our liabilities and pay our pensioners. There is also growing pressure from regulators to allocate more investments into safer assets such as government bonds."

This switch into bonds because of equity volatility and regulations is known as derisking and explains the latest data this month from the UK Pensions Regulator, showing defined benefit schemes that guarantee a fixed annual income in retirement are holding more bonds than equities.

'What we are seeing is not the death of equities but the death of defined benefit pension schemes'

The UK's more than 6,000 defined benefit schemes on average hold 43 per cent of their assets in bonds and 38 per cent in equities. This reverses a trend set in motion in 1956 by the distinguished fund manager George Ross Goobey, whose landmark speech to pension fund managers encouraged the switch into stocks and out of bonds. Allocation to equities by UK pension funds peaked in 1993 at 81 per cent, according to data from UBS Global Asset Management's Pension Fund Indicators report.

Yet, despite the new numbers, some of the world's biggest managers of pension funds reject the claim that equities are on the

wane and argue that the trend towards bonds may have run its course and be turning the other way.

Michael Dobson, chief executive of Schroders, whose equities business has halved as a proportion of total assets under management since 1999, says: "I do not believe for one moment that we are seeing the death of equities. Equities are still attractive for many reasons, whether it is yield, risk returns or the fact that some are trading on a cheap basis."

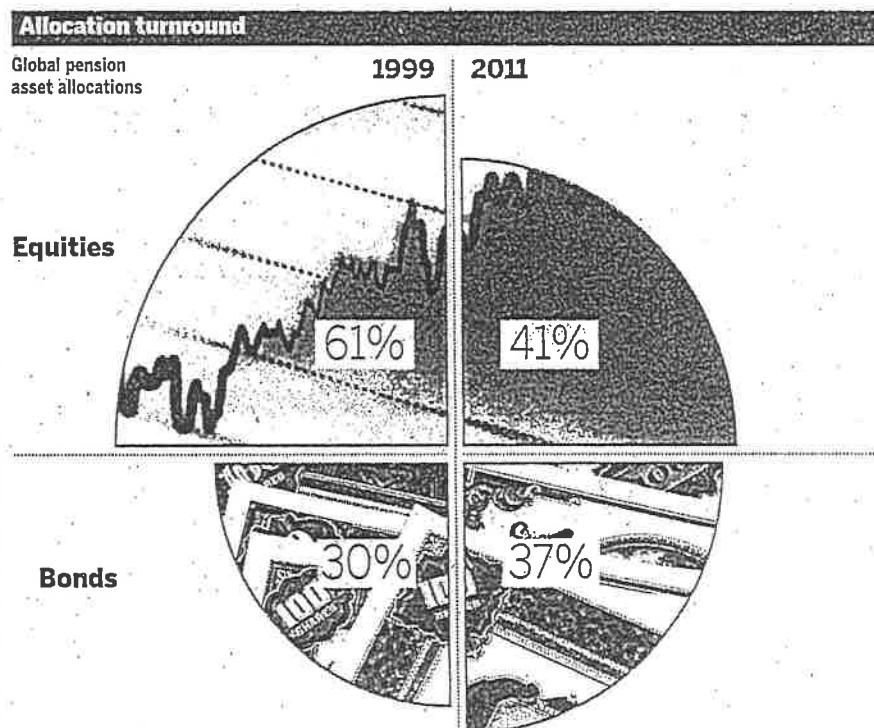
Mr Dobson, who has more than £200bn under management at Schroders, a large slice of which is pension fund money, adds: "I always think that when people start talking about the death of something, it often means a revival. We could see people starting to switch back into equities."

Others say the market is not experiencing the death of equity, but an entirely different phenomenon.

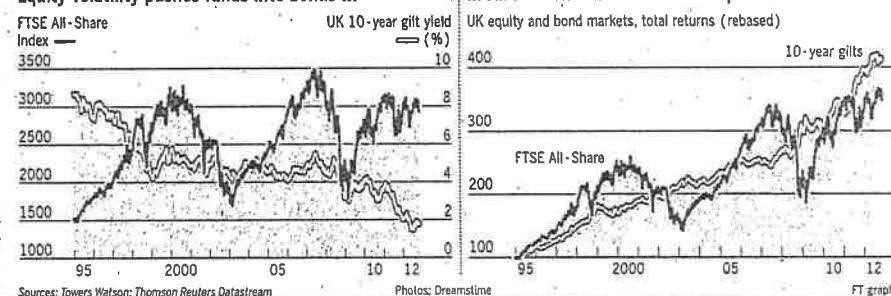
John Ralfe, head of Ralfe Consulting, says: "What is described as the death of equities is a symptom of something else. The symptom is a change in pension schemes. What we are seeing is not the death of equities but the death of defined benefit pension schemes."

Mr Ralfe, who as chief financial officer at Boots in 2001 switched the company's entire pension portfolio into bonds to reduce risk, singles out the closure of defined benefit schemes as the driver behind flows into fixed income, with a growing proportion of schemes nearing maturity.

This is because managers of mature schemes, or those



Equity volatility pushes funds into bonds ...



with an increasing number of members reaching retirement age, need fixed streams of income that are provided by bonds to pay their pensioners.

Alasdair Macdonald, head of investment strategy at consultants Towers Watson, agrees with Mr Ralfe that the closure of defined benefit schemes is forcing pension fund managers into simple as bonds versus bonds.

In the UK, he says, expects this trend into bonds to last for another 30 years as these schemes continue to mature.

He says pension scheme managers have to play safe and buy bonds, as to do otherwise risks company failures and the renegeing on commitments to pensioners.

But, even in the UK, the argument may not be as simple as bonds versus bonds. In the UK, he says,

Instead, it may be more about getting the right mix of a variety of assets.

Andrew Milligan, head of global strategy at Standard Life Investments, says: "It is no longer a case of do I buy gilts or the FTSE 100.

"That is very old fashioned. You have to look at a

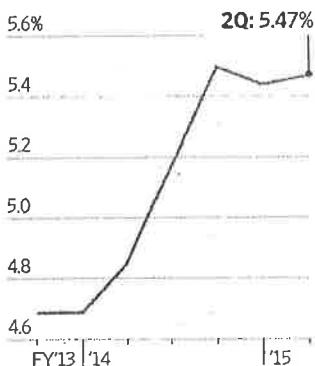
whole range of assets from property to emerging markets to exchange traded funds."

Broadly, he says, the pessimists are more likely to skew their portfolios towards bonds as they fear weak growth and possibly recession, while optimists might ratchet up their equity weightings in the hope of recovery.

But, in his view, most fund managers will hedge against both. In an uncertain world, the watchword is diversification.

**Stocking Up**

Japan's public pension fund has rapidly increased its stockholdings.

**Share of Tokyo's equity market owned by GPIF**

Note: Fiscal year ends March 31.

Sources: Government Pension Investment Fund; Japan Exchange Group

# Japanese pension funds leap into foreign and local equities

FT Jun 1, 2015

## ASIA

'Radical diversification' provides windfall for asset managers

## MADISON MARRIAGE

Japanese institutions are poised to raise their allocations to domestic and international equities significantly in a shift that is expected to lead to big asset wins for international fund managers.

The asset management industry is anticipating that three Japanese public pension funds with combined assets of Y30tn (\$242bn) will follow the Government Pension Investment Fund and increase their exposure to domestic and foreign stocks.

The GPIF, which oversees more than \$1tn of assets, announced substantial changes to its asset allocation policy last October, reducing its government bond target from 60 per cent to 35 per cent and doubling its targets for foreign and domestic stocks to 25 per cent each.

Japan's Pension Fund Association for Local Government Officials, the Federation of National Public Service Personnel Mutual Aid Association and the Promotion and Mutual Aid Corporation for Private Schools of Japan are expected to adopt similar policies by the end of the year.



Japanese pension schemes are 'embarking on the most radical diversification in living memory' — Tomoko Ohsurn/Bloomberg

Amin Rajan, chief executive of Create Research, the consultancy, said these pension plans were "embarking on the most radical diversification in living memory".

He added: "Many [Japanese pension funds] have never invested in equities. For some, stock markets [had] casino undertones. [This is] all changing now, as the GPIF and [the Bank of Japan] buy equities actively or via [exchange traded funds]. Making this kind of leap is really a game changer."

Japan Post Insurance and Japan Post Bank — two of the country's largest institutions, with assets of \$850bn and \$2tn

respectively — are similarly planning to raise their allocations to equities.

Genzo Kimura, economist at Sumitomo Trust, the asset manager, said that "even a 1 or 2 per cent shift [towards equities by Japan Post Bank] would have a huge impact on the domestic equity market".

Asset managers are also eyeing big windfalls from Japanese retail investors, who have been encouraged by the government to invest in domestic stocks through Nippon Individual Savings Accounts, which were introduced last year.

Taro Ogai, managing director of investment consultancy Towers Watson in Japan, said

the push by Shinzo Abe, the Japanese prime minister, to improve corporate governance in the country's biggest companies has helped drive institutional interest in the domestic stock market.

He added: "Insurance companies need to invest outside domestic bonds because interest rates are so low, so they are slowly increasing allocations to equities. Nisas are encouraging individual investors to invest in equities and mutual funds, and public pension funds have been appointing new active managers."

"This is a significant fundamental change and asset managers are enjoying it."

# Pensions Eye Reducing Hedge-Fund Investments

WSJ Oct 20, 2014

By DAN FITZPATRICK

Pension-fund managers across the U.S. are rethinking their investments in hedge funds in the wake of a retreat by the California Public Employees' Retirement System.

In San Francisco, the chairman of that city's pension fund has put on hold a vote to invest 15% of its assets in hedge funds. In Austin, Texas, officers responsible for the retirement savings of city police officers are discussing whether to withdraw all of their hedge-fund investments. In Harrisburg, Pa., a prominent state official asked the systems that manage money for teachers and other public workers to reconsider the \$7.6 billion parked in such investments.

"We need to be talking about this," Pennsylvania Auditor General Eugene DePasquale said in an interview.

The new conversations were spurred by Calpers, the largest U.S. public pension fund, which last month decided to shed its entire \$4 billion in hedge-fund investments over the next year. Calpers said the investments were too small a slice of its \$298 billion portfolio to justify the time and expense they required.

So far, those talks haven't led to widespread exits. But the concerns offer evidence that public pension funds are reconsidering their decadelong pursuit of hedge funds as an alternative way of boosting long-term returns and closing funding gaps.

At stake for hedge funds is billions of dollars in investments made by public pension funds on behalf of public-sector employees. Over the past decade, pensions have increasingly moved away from stocks and bonds and put money into investments such as hedge funds, real estate and private equity as alternatives to stocks and bonds. Now, about half of the U.S. public pensions have some sort of hedge-fund investment, according to data tracker Prequin.

Hedge funds typically bet on and against stocks, bonds or other securities, often using borrowed money. That can amplify their gains and their losses. Hedge funds also charge higher fees than other money managers, usually 2% of assets under management and 20% of profits.

Hedge funds performed better than many investments during the 2008 financial crisis, falling

on average by less than 20%, compared with the 37% drop in the S&P 500, according to HFR, a hedge-fund research firm. This helped attract even more pension money. But they have struggled overall to repeat that success in recent years.

Average public-pension gains from hedge funds were 3.6% for the three years ended March 31, according to a review of public pensions with more than \$1 billion in assets by Wilshire Trust Universe Comparison Service. That compared with a 10.9% return from private equity, a 10.6% return from stocks and 5.7% from fixed-income investments.

After peaking at 1.81% in 2011, pension allocations to hedge funds fell to 1.35% of total portfolios as of June 30, according to Wilshire.

Calpers wields hefty influence among public pensions, due in large part to its size and history as an early adopter of alternative investments to stocks and bonds. When the pension fund waded into hedge funds 14 years ago, it was among the first to do so.

It is unclear where much of this money could end up, but Calpers officials have said they want to increase their commercial-real-estate investments. Officials last week also said they want to move into other asset-backed investments such as pools of corporate loans.

Even board members in favor of holding firm on their hedge-fund commitments want to know why the California decision shouldn't change their thinking, according to Stephen Nesbitt,

chief executive of Cliffwater LLC, a consultant to such funds.

"The public funds have got to justify why they are doing it," said Stephen Potter, president of asset management for Chicago-based Northern Trust Corp., which advises public pensions and invests their money.

Investors of all types continue to pour money into hedge funds, but there are indications they aren't quite as enamored with big funds as they once were. The hedge-fund industry managed a record \$2.82 trillion at the end of the third quarter, an increase of \$18 billion, or 0.6%, from the

## At stake is billions of dollars in investments made by pension funds on behalf of public-sector employees.

prior quarter, according to HFR.

Investors added \$15.9 billion of new capital to hedge funds in the quarter, a decline from \$30.5 billion of new money in the second quarter. And for the first time since 2009, big funds saw less new money than smaller funds. Firms managing less than \$1 billion received \$5.1 billion in capital inflows, HFR says, while midsize firms, managing between \$1 and \$5 billion, received \$6.6 billion of new cash. The industry's largest firms, managing greater than \$5 billion, received inflows of just \$4.2 billion.

Even Calpers had some of the same internal debates about the merits of hedge funds before deciding to exit. In the years leading up to the move there was widespread disagreement about the investments. Some officials pushed to put even more money into hedge funds. Others openly doubted the ability of hedge funds to serve as a buffer during times of stress. "You got eight people in the room and 12 opinions about what to do," former Chief Investment Officer Joseph Dear said of hedge funds during a November 2013 discussion, according to an online recording.

One public pension official who took action after Calpers pulled the plug was Sampson Jordan, chief executive of the Austin Police Retirement System, who began studying whether to exit from the holdings completely. His organization has 15% of its \$625 million tied up in hedge funds, and those investments have lost money year to date. "Calpers is like the godfather of retirement systems," Mr. Jordan said. "It's always alarming when the big guy makes a statement like that."

When Rosemary Gannaway, the chairwoman of the County Employees Retirement Fund in Jefferson City, Mo., read about the Calpers decision, she said she also requested that the topic be put on the agenda for her next board meeting. The fund has 25% of its assets in hedge funds, according to Prequin.

—Gregory Zuckerman  
and Daniel Huang  
contributed to this article.

# US pension funds halve private equity allocations

**INVESTMENT STRATEGY**  
Buyout companies struggle to find suitable businesses to back

CAT RUTTER POOLEY AND ATTRACTA MOONEY

Big US investors have halved their allocations to private equity this year. It is the first sign that pension funds are concerned investment returns will suffer as buyout houses struggle to deploy record levels of cash.

Pension funds and other institutional investors gave \$3.2bn to private equity funds in January and February compared with \$8.9bn announced during the same period last year, according to data from MandateWire, the FT news service that collated the figures.

Amin Rajan, chief executive of Create Research, the consultancy, said big investors have turned to illiquid assets, such as private equity, in recent

years in a hunt for returns in the low-yield environment.

But he added investors are now worried about lower returns and difficulties exiting their investment in future, as the number of initial public offerings decreases.

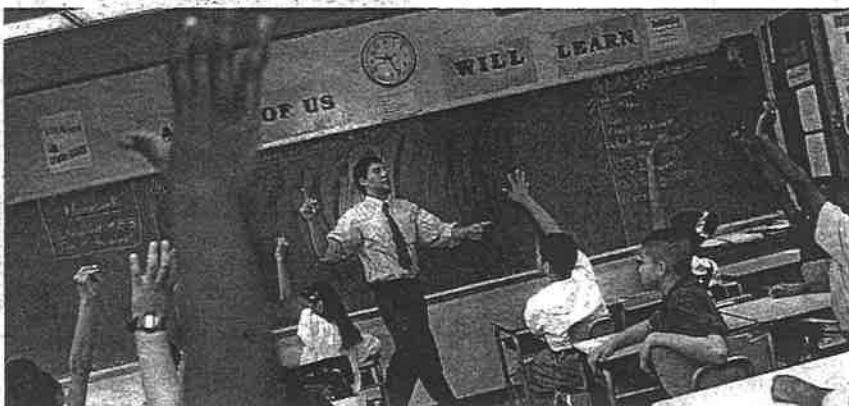
There are also concerns that the private equity market has become overcrowded, with buyout companies struggling to find suitable businesses to back.

Mr Rajan said: "Future flows may ease for two reasons: lack of attractive targets and worries about exit strategies due to political risks."

According to a report from Pitchbook, the data provider, the level of cash, so-called dry powder, that private equity companies have to invest hit a record high of \$754bn in 2016.

More than 80 per cent of the capital raised by private equity companies in 2015 has yet to be deployed, said Pitchbook.

Private equity managers are



The New York State Teachers Retirement System pension fund has cut its private equity investment  
Chris Hondros/Newsmakers

Future flows may ease [due to] lack of attractive targets and worries about exit strategies'

struggling to find suitable companies to back because of rising competition from other investors for deals, high company valuations and a change in how investments are financed.

Will Kinlaw, senior managing director at State Street Global Exchange, the US financial services company, said: "[Private equity managers are] facing greater uncertainty and more competition for deals as

[merger and acquisition] activity has increased. It is not surprising that they are taking a pause."

According to a study by Bain & Company, the consultancy, private equity groups are losing out in fierce bidding wars to cash-rich buyers. Just 4.2 per cent of deals ended up with private equity buyers in 2016, down from 5.4 per cent in 2014.

In its report, Pitchbook warned of declining returns in the future. "Given those lofty prices [for companies], as well as lower levels of leverage being used across the market, it will become harder [for private equity companies] to produce the returns to which many PE investors have become accustomed," the research read.

The New York State Teachers Retirement System pension fund has cut the amount of money it invested in private equity sharply this year. In the first two months of last year it announced allocations of \$955m to private equity managers, compared with \$200m this year.

Despite this, Mr Kinlaw said big investors are still interested in private equity. "Many of our big institutional clients are significantly underweight private equity relative to where they want to be. They are still looking for opportunities."

## MARKETS

# 100-Year Treasurys? No Thanks

Advisers to agency say the ultralong debt wouldn't find much favor among investors

By JOSH ZUMBRUN

A committee of Wall Street advisers is pouring cold water on a proposal by Treasury Secretary Steven Mnuchin to issue 50-year and 100-year U.S. government bonds, arguing that the big pension funds and insurers expected to buy the securities won't have much interest.

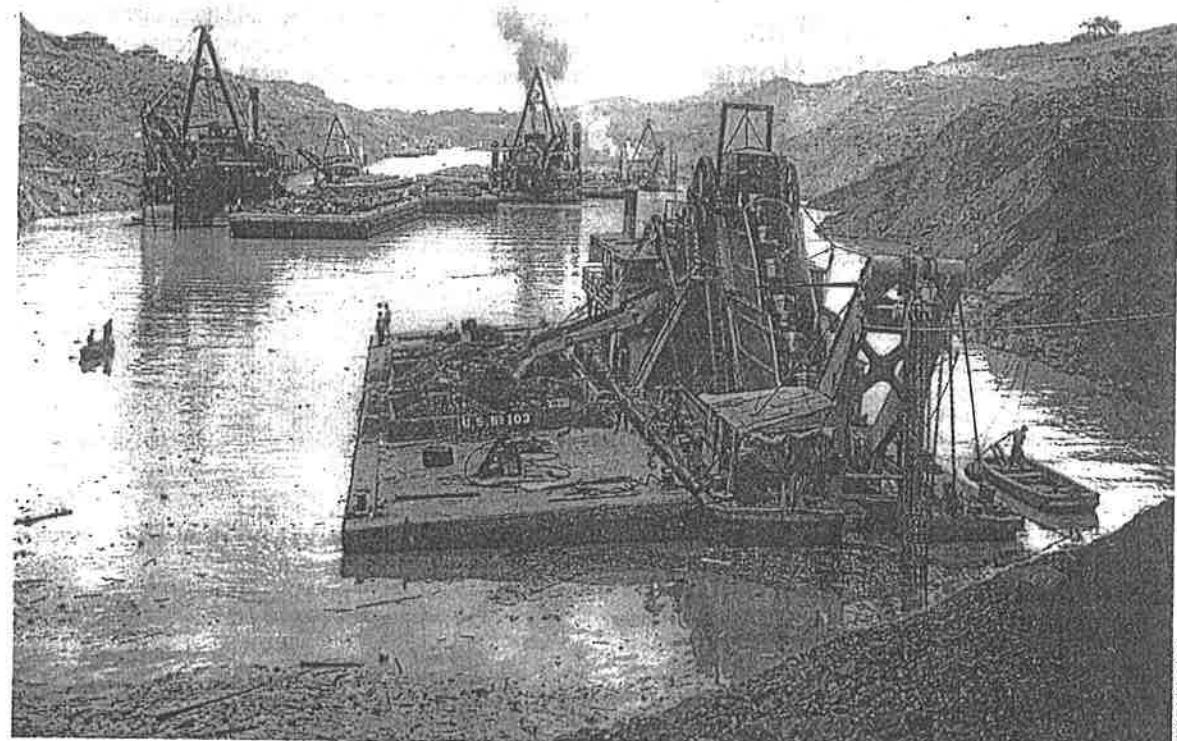
The Treasury's Borrowing Advisory Committee, composed of representatives from some of the largest financial institutions that participate heavily in the bond market, told the Treasury that "the committee does not see evidence of strong or sustainable demand for maturities beyond 30 years."

The committee meets quarterly, in advance of a regular release by the Treasury on its plans for financing the U.S. debt. Currently, the U.S. Treasury issues no debt longer than 30 years. Mr. Mnuchin has argued that ultralong bonds could be a useful tool for locking in today's low borrowing costs for a long time. Last month, the Treasury requested that the advisory committee analyze the viability of bonds longer than 30 years.

Monique Rollins, the acting assistant secretary for financial markets, said that despite the advisory committee's cool response, the Treasury would continue to study longer-term bonds and seek input from a broad community beyond just those on the committee. An update will be provided at a future quarterly announcement, the Treasury said.

The idea of ultralong bonds has riveted Wall Street. When Mr. Mnuchin first floated the idea in a November interview on CNBC, it sent long-term interest rates climbing higher as investors anticipated that rates would need to rise to accommodate a greater volume of longer-term debt.

The 30-year bond strengthened Wednesday after the advisory committee cast doubt on the idea of 50- and 100-year bonds. The yield on the 30-year Treasury sank to 2.955%, from 2.982% on Tuesday.



The Treasury Department issued 50-year bonds to fund the building of the Panama Canal. Above, dredging the canal in 1915.

Yields fall as bond prices rise.

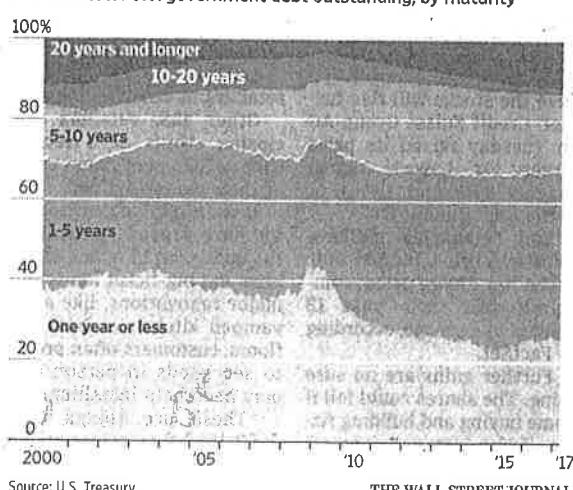
The Treasury needs neither legislative changes nor the advisory committee's approval to move forward with ultralong bonds. Still, the committee's opinion is likely to weigh heavily on the Treasury's decision. The members of the advisory committee include several primary dealers—the institutions authorized to participate directly in Treasury auctions—and some of the world's largest hedge funds and asset managers, such as Vanguard Group and BlackRock Inc.

One question for the Treasury is what types of investors would buy ultralong bonds, especially if the members of its advisory committee aren't interested. Relatively few individual investors have 100-year or even 50-year investing horizons.

Due to pension funds, insurers and index funds, "there will be underlying structural demand for 50 years, but it could be at the expense of other longer-date Treasury issuance," said Gemma Wright-Casparius, a principal senior portfolio manager at Vanguard Fixed Income. In other

## Short View

Share of total U.S. government debt outstanding, by maturity



the Treasury concluded it could most efficiently finance large amounts of debt through regular auctions of 30-year bonds.

A number of countries have issued small numbers of long-term bonds. Canada has a 50-year bond, Austria has sold 70-year bonds. Ireland, Mexico and Belgium are among countries that have issued 100-year bonds.

Most of these offers, however, have been sporadic or one-time issuances that would have little impact on those nations' long-run borrowing costs. The U.K. relies most heavily on ultralong-term debt, but the nation also has regulations that require its pension funds to buy the debt.

The U.S. advisory committee said pension plans, life insurers and annuity companies are a potential source of demand, because such firms have liabilities that may be due long into the future. But the committee said pension plans would "not be a large or reliable source of demand for ultralong issuance" and that most insurers would prefer to have more 20-year bonds.

words, the success of a 50-year bond could come at the expense of a 30-year bond.

While the longest U.S. bond now is 30 years in duration, the Treasury has experimented with longer bonds in the distant past. President Dwight Eisenhower had a campaign pledge of "stretch-

ing out" the national debt, and his Treasury Department issued two 40-year bonds. From 1955 to 1963, a total of seven ultralong bonds were issued. Early in the 1900s, the Treasury issued 50-year bonds to fund the construction of the Panama Canal.

Over the years, however,

**Government debt**

# Taking the ultra-long view

NEW YORK

## The Methuselah trade

**H**OW can governments borrow most cheaply? The answer matters hugely for taxpayers. Take America: it has \$14tn in outstanding national debt, fully three-quarters of GDP. Interest payments alone are expected to reach \$280bn this fiscal year—ie, more than three times the combined budgets of the Departments of Education, Labour and Commerce.

The problem largely comes down to deciding how much long, medium and short-dated debt to sell. Almost every country issues a combination of these maturities. In the current low interest-rate environment, however, many argue that governments should sell proportionately more long-dated bonds to make sure they are able to pay historically low rates for many decades to come, thereby saving taxpayers money in the long run.

Some countries have already ploughed ahead. In recent years Britain, Canada and Italy have sold 50-year bonds; Mexico, Belgium and Ireland have issued 100-year debt. The latest country to flirt with the idea is America: last month the Treasury sent out a survey to bond-dealers to gauge market appetite for 40-, 50- and 100-year bonds. On May 3rd officials said that Steve Mnuchin, the treasury secretary, had set up an internal working group to take a look at ultra-long bonds. Mr Mnuchin has expressed the view that they could “absolutely” make sense.

Not everyone agrees, including, it seems, the private-sector financiers who make up the Treasury’s own borrowing advisory committee, which met this week. Long-term rates are at historic lows but short-term rates are even lower. The weighted average maturity (WAM) of outstanding Treasury debt is 5.7 years, and the effective interest rate paid on the total pile of debt is 2.03%. The yield on 30-year Treasuries is 3%, so selling even longer-dated debt will raise the overall cost. Even a 0.1 percentage-point rise would add roughly \$14bn to the taxpayer’s burden.

Moreover, ultra-long bonds would be cost-effective in the long run only if short- and medium-term interest rates eventually exceed the levels of long-term rates today. Otherwise governments could simply roll

over short-term debt. Issuing very long-term debt is, in effect, like paying for insurance against future interest-rate rises.

So whether ultra-long bonds would save taxpayers money depends on future inflation and growth. Higher levels of each would probably push up short- and medium-term interest rates. But this is not inevitable. Alex Gurevich of HonTe Investments, a California-based fund-management firm, says interest rates in America are more likely to remain at current levels than to revert to the mean seen in the late 20th century. If Mr Gurevich is right, ultra-long bonds sold today may, ironically, lock in higher rates for longer.

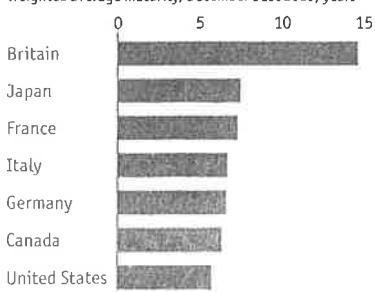
Finally, the demand for ultra-long government bonds is unpredictable. Institutional investors with long-term liabilities, such as pension funds and insurance companies, may be happy with 30-year bonds, which most countries already sell, or may opt for higher-yielding long-dated corporate bonds, such as those issued by Caterpillar, an American construction-equipment company. Sales of ultra-long government bonds, despite fanfare, have so far been one-off events and do not provide much of a guide. Low demand would in turn send yields higher, raising government debt-servicing costs.

In some countries, such as Britain, interest rates on long-term debt are not much higher—or are even lower—than on shorter-term borrowing. For them, borrowing at ultra-long maturities is likely to be cheaper than medium-term debt, so it makes sense to replace some mid-length bonds with ultra-long ones, says Niso Abuaf of Samuel A. Ramirez & Company, a New York brokerage. This helps to explain why the WAM of British sovereign debt is unusually long, at 14.9 years (see chart).

Ultra-long debt is also very attractive to governments such as Mexico’s, which have a recent history of fiscal profligacy and high inflation, yet are able, while investors still trust them, to borrow for the long term very cheaply. In America, however, where Treasury bonds serve not just to raise funds but to set global benchmarks, the calculation is a trickier one. ■

### The long and the short of it

Central-government debt outstanding  
Weighted average maturity, December 31st 2016, years



Source: HM Treasury

Wednesday, October 26, 2016

**Priced to Move**

Some of the longest-term bonds sold this year (yield / currency)

Massachusetts Institute of Technology (3.9% / USD)	100 years to maturity
Ireland - National Treasury Management Agency (2.4% / EUR)	100
Republic of Austria (1.5% / EUR)	70
Energie Baden-Wuerttemberg AG (3.5% / EUR)	61
Southern Co (5.3% / USD)	60
Republic of Italy (2.9% / EUR)	50



A tram picks up passengers in front of the Vienna State Opera. Austria on Tuesday issued a 70-year bond at a yield of 1.53%.

# On Sale in Austria: A 70-Year Bond

By EMESÉ BARTHA

Austria took a step far into the future by issuing a 70-year bond on Tuesday, the latest example of how central banks' easy-money policies are prompting issuers to secure cheap borrowing for many decades ahead.

The sovereign completed a dual-tranche transaction, issuing €3 billion (\$3.26 billion) of seven-year debt and €2 billion of 70-year debt, the lead managers said.

The July 2023 bond was

priced at 101.289 to yield minus-0.191%, while the November 2086 bond was priced at 98.717 to yield at 1.53%.

Order books were in excess of €5.4 billion for the 2023-dated bond and more than €7.8 billion for the 2086-dated bond, said one of the lead-manager banks.

The latter transaction represents the longest-dated, publicly issued government bond in the eurozone.

Ireland and Belgium have previously issued €100 million of 100-year bonds in private

placements.

The transaction came amid a flow of ultralong government-bond issuance, triggered by weak global economic growth and low inflation, as well as huge bond purchases by the European Central Bank.

The ultralow-interest-rate environment, meanwhile, has intensified investors' hunt for yield, impelling them to take on more risk or reach out further into the future.

The deal size of the 70-year bond was in line with expectations of some analysts.

Rates strategists at ING Bank had said before book opening that in light of hedging for ultralongs by pension funds and insurers, they forecast an initial size of €1.5 billion to €2 billion for the 70-year tranche.

Before the issuance, Commerzbank calculated eurozone sovereigns had already placed more than €15 billion in 50-year paper year-to-date.

This includes syndicated 50-year bond launches in France, Belgium, Spain and Italy.

# Italy Debuts 50-Year Bond to Strong Demand

By CHRISTOPHER WHITTALL  
AND EMESE BARTHA

Italy sold €5 billion (\$5.6 billion) of debt in its debut 50-year-bond issue in a further sign of how much economic stress investors will overlook amid the global hunt for yield.

There were **CREDIT MARKETS** more than €18.5 billion of orders Tuesday for the bonds that mature in 2067 and that were priced at a yield of 2.85%, according to people familiar with the deal. The strong demand allowed the Italian treasury to raise more than the roughly €3 billion to €4 billion that analysts had expected.

Italy's debt sale comes as borrowing costs in developed nations have sunk to historic lows this year amid tepid global growth and inflation and extraordinary bond buying by central banks. Investors reaching for returns have bought bonds with maturities of as long as a century and from countries with lower credit ratings.

Belgium and Spain both sold their first 50-year bonds in public markets this year, with each raising €3 billion. France, which has sold long-dated bonds in the past, also



SILVIA LORE/NURPHOTO/ZUMA PRESS

Investors brushed off worries about Matteo Renzi's government.

raised €3 billion in new 50-year debt. Meanwhile, Ireland and Belgium have both sold €100 million of 100-year bonds in privately placed deals.

"The search for yield is one key reason," said Axel Botte, a fixed-income strategist at Natixis Asset Management.

The yield on Italy's 50-year bond looks high in relative terms, Mr. Botte said, and there is demand for long-dated securities from institutional investors such as pension funds that need to match their liabilities.

France's 2066 bonds yield 1.36%, according to Tradeweb. Spain's 2066 bonds, which were sold with a yield of 3.493% in May, yield 2.55%. Yields fall as prices rise.

But the case for investing in long-dated Italian debt isn't as clear-cut as for some of the country's eurozone neighbors. Italian lenders are at the center of concerns over bad loans in the European banking system. Investors also cited a referendum scheduled for December as a vote of confidence in Italian Prime Minister Matteo

Renzi that could rattle markets. Meanwhile, economic growth in Italy has stagnated.

Italian debt has underperformed this year compared with Spain, the eurozone's fourth-largest economy. The gap in yield between Italian 10-year bonds and haven German debt also has widened.

"There's definitely been some underperformance of Italy relative to Spain over the last month or so as the upcoming referendum weighs on Italian bonds," said Nick Sanders, a portfolio manager at AllianceBernstein.

Even so, Italian bond yields have fallen this year in absolute terms, as investors faced with an increasing pool of negative-yielding government debt have fanned out in search of returns. Despite a slight increase in bond yields recently, there was still roughly \$11 trillion of negative-yielding sovereign debt in mid-September, according to Fitch Ratings.

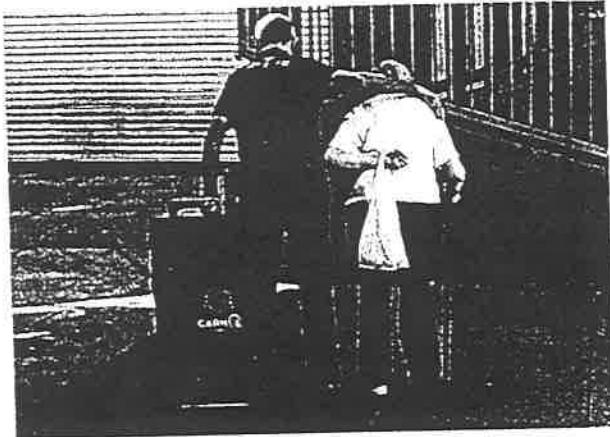
Moreover, the European Central Bank's €80 billion monthly bond purchases continue to support eurozone government debt.

"With the upcoming risks in Italy, the fact that yields are so low shows there is still a search for positive yield," Mr. Sanders said.

## Pension funds call for an end to inflation targets

CEOs of large European schemes say interest rates have been pushed too low

ALIYA RAM



Richard Grottheim: 'There is a problem today with getting inflation to the target' — Pau Barrena/Bloomberg

The chief executives of some of Europe's largest pension funds have called on central banks to drop or reduce inflation targets that they believe are jeopardising the savings of millions of pensioners.

Richard Grottheim, the chief executive of AP7, the Swedish pension fund, and a former policymaker at the country's central bank, said inflation targets have pushed interest rates so low that pension funds are struggling "to create any return at all" for their members.

The chief executive of ATP, Denmark's largest pension fund, which has DKK800bn (\$120bn) under management, added that he was "deeply worried" about monetary policy.

The Bank of Japan, the European Central Bank and four other central banks around the world have introduced low or negative interest rates in recent months in an effort to bolster economic growth and counter the threat of deflation.

As a result Larry Fink, chief executive of BlackRock, the world's largest asset manager, said not enough attention was being given to the impact of negative rates on individuals' saving habits.

Mr Grottheim said: "Governments are in deficit and it is hard for them to stimulate the economy." Without fiscal stimulus the burden of a 2 per cent target has fallen too heavily on the shoulders of monetary policy and central banks, he said.

Johan Magnusson, the chief investment officer of AP4, one of Sweden's other large pension funds, added that single number targets should be scrapped in favour of a "more flexible" framework. According to Mr Magnusson, inflation targeting creates "moral hazard issues" in which more serious problems are crowded out by an "obsession with inflation targeting".

Mr Grottheim, who led the Riksbank's monetary policy department when inflation targets were first introduced in Sweden in the 1990s, said that 2 per cent targets are too ambitious in an era of lethargic wage growth.

"Creating low inflation environments is good for growth ... but there is a problem today with getting inflation to the target."

Denmark, Switzerland and Sweden have all moved to sub-zero interest rates in recent years, prompting concerns of a full-blown funding crisis for pension schemes that rely on higher rates to drive down the prices of bonds and equities.

In Sweden, the repurchase rate at which banks can borrow is now -0.5 per cent, after first turning negative in February last year.

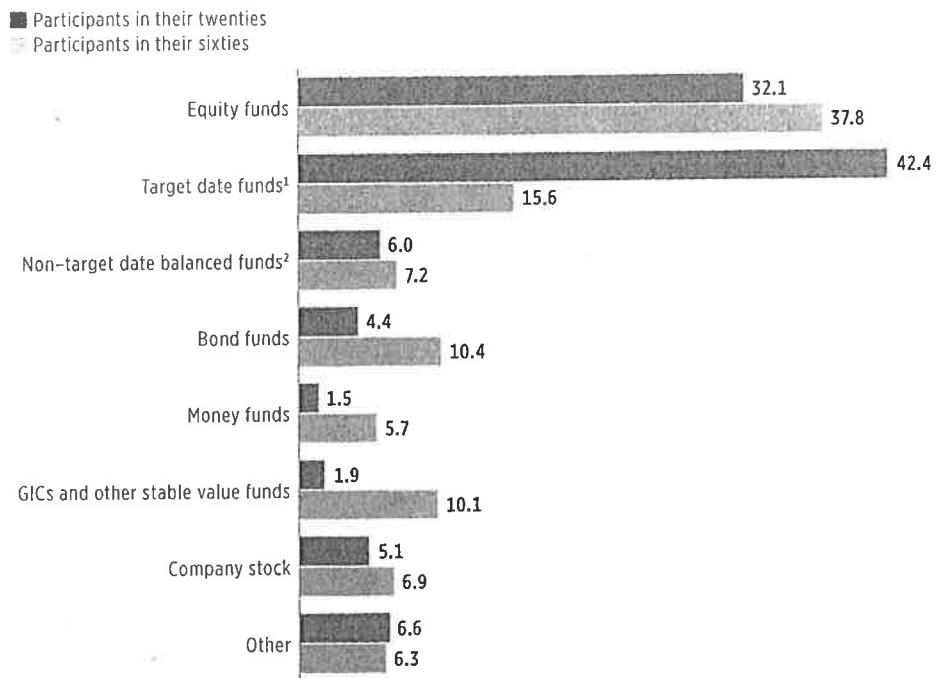
Philippe Desfossés, chief executive of ERAFP, France's €24bn pension scheme for civil servants, told FTfm in April that he believes "many pension funds in Europe will implode over the next two to three years" if the central bank's low interest rate policy continues.

He said the ECB's unconventional monetary policy is "weighing heavily on the pension fund industry". He believes this fact has been overlooked as policymakers have been distracted by the challenges facing banks and insurers, "even though the risks facing pension funds are continuing to grow".

In August, the Bank of England's first interest rate cut since the financial crisis led to calls for a national inquiry into the impact of quantitative easing on company pensions.

Inflation targets have pushed rates so low that pension funds are struggling "to create any return at all" for their members

**FIGURE 7.12**  
**401(k) Asset Allocation Varied with Participant Age**  
*Average asset allocation of 401(k) account balances, percentage of account balances, year-end 2014*



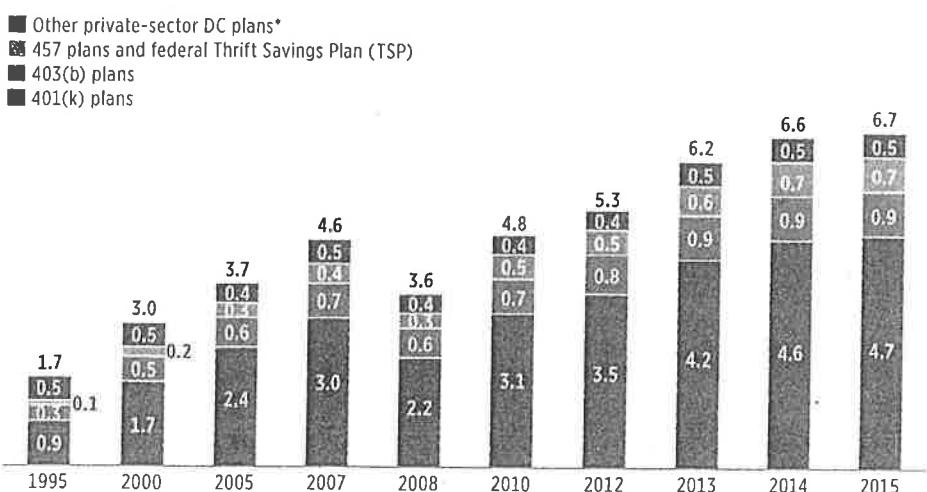
<sup>1</sup> A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

<sup>2</sup> The Investment Company Institute classifies balanced funds as *hybrid* in its data.

Note: Funds include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated. Percentages are dollar-weighted averages.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project. See *ICI Research Perspective*, "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2014."

**FIGURE 7.9**  
**Defined Contribution Plan Assets by Type of Plan**  
*Trillions of dollars; year-end, selected years*



\* Other private-sector DC plans includes Keohgs and other private-sector DC plans (profit-sharing, stock bonus, and money purchase) without 401(k) features.

Note: Components may not add to the total because of rounding.

Sources: Investment Company Institute, Federal Reserve Board, Department of Labor, National Association of Government Defined Contribution Administrators, and American Council of Life Insurers. See Investment Company Institute, "The U.S. Retirement Market, Fourth Quarter 2015."

## Buttonwood

### Workers are being deceived by past high returns

**I**N A world of low investment returns, many a pension scheme is in trouble. In both Britain and America employers who have promised to pay workers a pension based on their final salary are struggling to cope with huge deficits.

But the problem is not confined to those with so-called defined-benefit (DB) pensions. It also affects those saving for retirement via a defined-contribution (DC) scheme, where both employer and employee contribute, and the worker takes charge of the pot when his career ends. In America the most popular form of DC savings are called 401(k) schemes after a section of the tax code.

In an article\* in the *Journal of Retirement*, three authors from AQR Capital Management, an investment group, argue that workers in 401(k) schemes are simply not putting enough money aside.

What you get out of a pension depends on what you put into it. One would expect a DC pension to deliver a smaller income than a DB scheme because less money tends to be put in the pot. Total DC contributions average around 9% of payroll (6% from employees; 3% from employers). But figures from the Centre for Retirement Research at Boston College show that public-sector employers pay an average of 18.6% to fund DB pensions (with employee contributions of 6.5% on top).

So why don't workers in DC schemes put more money aside? The paper suggests that savers may have been deceived by the robustness of past returns. The authors assume that workers would like to retire on 75% of their final salary and that 30 percentage points of that would come from other sources, including social security. Furthermore, they assume 2% annual real-wage growth during workers' careers, and that, on retirement, savers buy a 25-year annuity with their pot.



Based on historical real returns of 7.5% from equities and 2.5% from Treasury bonds (before charges), it turns out that, in the past, workers could have hit the income-replacement ratio target with only an 8% contribution rate. That may explain why they are not saving more today.

But it is highly unlikely that future investment returns will be as high as they were in the past. Bond yields have fallen and equity valuations are high by historical standards. Investors have thus chalked up capital gains as bond and share prices have moved to these new, high levels. To replicate that performance, bond yields will have to fall even further and equities will have to be valued even more highly. This is not something that workers should be counting on. Real returns from equities are more likely to be 5% and from bonds 1%, the authors reckon.

Combine those real returns into a portfolio of 60% American equities and 40% Treasury bonds (a standard asset allocation) and you get an overall return of 3.5% a year. That is two percentage points lower than the 5.5% achieved from the same combination in the past. And it means that a

worker would have to save 15% a year, not the current 9%, to reach the target.

Even that approach looks optimistic. With bond yields less than 2%, inflation will have to average under 1% to deliver the 1% real return assumed by the authors. And fund-management charges will eat into returns as well. On a 2.5% real-return assumption, contributions would need to hit 19% of payroll.

What about a different asset allocation? Many advisers suggest that workers start off with a high allocation to equities and then switch to bonds as they approach retirement. Even that scheme would still require a 15% payroll contribution to meet the target rate.

So why aren't workers saving more? They may not be overestimating asset returns. Instead, they may be indulging in "hyperbolic discounting"—valuing the income they earn today far more highly than the income they will earn in old age. After all, employees in DC schemes tend to get lower retirement pay than those in DB plans (because employers are contributing less). Yet there is no evidence that workers in companies with DC plans demand more current pay to compensate.

But the main reason workers don't put more aside is probably that they can't afford to; since 1980, median pay in America has grown very sluggishly in real terms. That means they will face a stark choice as they approach retirement age: take a big cut in their incomes or keep working. Most will be forced to toil longer. Whatever the official retirement age may be, many Americans will be working at 70.

\* "How much should DC savers worry about expected returns?" by Antti Ilmanen, Matthew Rauseo and Liza Truax, *Journal of Retirement*, Fall 2016

# Firms Curb Raids on 401(k)s

WSJ, April 3, 2017

As early pillaging of accounts becomes a trend, employers worry workers won't retire

By ANNE TERGESEN

American companies are trying to stop employees from raiding their 401(k)s, in an attempt to ensure that older

workers can afford to retire and make room for younger, less-expensive hires.

Employers of all types—from Home Depot Inc. to a mortgage lender—are taking steps to warn workers of the financial implications of borrowing from their retirement accounts and pulling the money out when they leave jobs.

Tapping or pocketing re-

tirement funds early, known in the industry as leakage, threatens to reduce the wealth in U.S. retirement accounts by about 25% when the lost annual savings are compounded over 30 years, according to an analysis by economists at Boston College's Center for Retirement Research.

"Employers have done a lot to encourage people to save in 401(k) plans, such as automat-

ically enrolling them. But there is a growing recognition that if the money isn't staying in the system, the objective of helping employees reach their retirement goals isn't being met," says Lori Lucas, defined-contribution practice leader at investment-consulting firm Callan Associates Inc.

Movement Mortgage LLC, a Fort Mill, S.C.-based mortgage

Please see *SAVE* page A2

## SAVE

*Continued from Page One*  
lender with 4,200 employees, this year started requiring workers who initiate a 401(k) loan to consult with a financial counselor first, at the company's expense.

"We want them to stop looking at their 401(k) like a cash register," said Chief Executive Casey Crawford. Movement Mortgage aims to help employees get "a game plan in place," he said.

Employees who grew accustomed to borrowing from their 401(k)s during the recession are tempted by the rising balances in these types of plans, which currently hold \$7 trillion, up from \$4.2 trillion in 2009, experts say.

"People are getting statements telling them they have \$5,000 in this account and they are asking themselves, 'How can I get my hands on this money?'" said Rob Austin, director of retirement research at Aon Hewitt, a human-resources consulting firm.

Home Depot in recent years launched several initiatives aimed at "getting people out of the habit of going from one [401(k)] loan to the next," says director of benefits Don Buben.

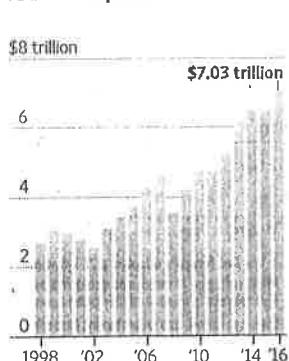
The home-improvement chain recently started making employees wait at least 90 days after paying off one 401(k) loan before initiating another. Workers are also encouraged to pay off their 401(k) loan balances early.

Since 2014, the total num-

### Loans and Leaks

As 401(k)-style plans have taken a greater role in Americans' retirement savings, 'leakage' of plan assets through unpaid loans and early withdrawals has emerged as a costly problem that saps savings.

#### Assets in 401(k)-style retirement plans



Sources: Investment Company Institute; Employee Benefit Research Institute

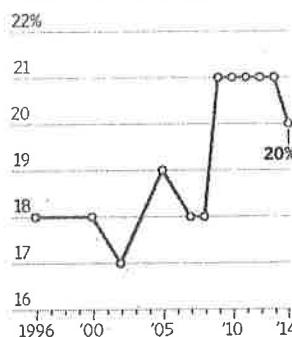
ber of outstanding loans at Home Depot has declined by 17%, the company said.

When applying for a 401(k) loan online, Home Depot employees automatically get a pop-up notice that includes an estimate of how much the loan would reduce the employee's savings by retirement age.

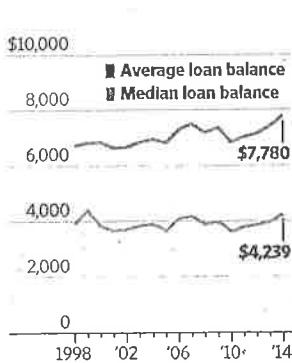
"Most people don't realize the impact of taking a loan," Mr. Buben said, adding that some borrowers reduce their 401(k) contributions while repaying their loans.

Other companies are taking different steps, including encouraging new employees to roll existing retirement savings from former employers' plans into their 401(k) plans. Some are preventing employees from borrowing money the employer contributed, and others are helping employees

#### Percentage of eligible 401(k) participants with loans outstanding



#### Median and average dollar amounts of 401(k) loans



THE WALL STREET JOURNAL.

amass emergency savings or tap funds other than their 401(k)s.

Redner's Markets Inc., which operates grocery and convenience stores in Maryland, Delaware and Pennsylvania, is offering a low-cost loan outside the 401(k) plan as an alternative for would-be borrowers.

ABG Retirement Plan Services, a Peoria, Ill., 401(k) recordkeeper and administrator, plans to soon start offering its employees the option to contribute—via payroll deductions—to an emergency savings account linked to its 401(k) plan. The company plans to offer its clients the feature this summer.

A typical 401(k) account offers participants several ways to tap their savings before retirement.

On average, about 30% to 40% of people leaving jobs elect to cash out their accounts and pay taxes and often penalties rather than leave the money or transfer it to another tax-advantaged retirement plan, according to recordkeepers and economists.

Most plans also allow people to pull out their savings—after paying taxes and typically a penalty—for reasons including buying a home, preventing foreclosure, and paying medical bills and college expenses, something relatively few participants do annually. These are known as hardship distributions and the employee must demonstrate an "immediate and heavy financial need," according to the Internal Revenue Service.

Employees can also generally choose to borrow up to

half of their 401(k) balance or \$50,000, whichever is less, without having to state a reason. According to the Employee Benefit Research Institute, a nonprofit research group, 87% of participants are in plans that let them take 401(k) loans.

About a fifth of 401(k) participants with access to 401(k) loans take them, according to the Investment Company Institute, a mutual-fund industry trade group. While most 401(k) borrowers repay themselves with interest, about 10% default on about \$5 billion a year, says Olivia Mitchell, an economist at the University of Pennsylvania's Wharton School.

"401(k) plan leakage amounts to a worryingly large sum of money that threatens to undermine retirement security," says Jake Spiegel, senior research analyst at research firm Morningstar Inc. His calculations show that employees pulled \$68 billion from their 401(k) accounts taking loans and cashing out when changing jobs in 2013, up from \$36 billion they withdrew in 2004.



Wide receiver Donald Driver celebrates with a 'Lambeau Leap' after a touchdown against the St. Louis Rams.

# Green Bay's Hottest Stock

*Packers Offer Shares; No Dividends, but a Home-Field Edge*

By CICELY K. DYSON

As stock investments go, the Green Bay Packers' latest \$62.5 million offering isn't very good. It pays no dividends, can only be transferred to family and can't appreciate in value.

But that hasn't stopped the rabid fans of the National Football League's only undefeated team from paying \$250 a share for the first Packers offering since 1997.

The Packers need \$143 million to expand their stadium, Lambeau Field. And they are calling on the offering—the squad's

fourth in 92 years—to help finance the addition of 6,700 seats. The project will make Lambeau Field the fourth-largest stadium in the league.

The team, which is structured as a Wisconsin nonprofit, is selling 250,000 shares in the initial sale, with authority to offer as many as 888,000 shares.

When the offering opened at 8 a.m. Tuesday, the Packers sold 1,600 shares in the first 11 minutes. And by the time the offering closes on Feb. 29, the team hopes to have sold \$22 million worth, according to Mark Murphy, the Packers president and

chief executive.

"We have the most loyal and passionate fans in the league," said Mr. Murphy. "People realize it helps the community. They know the team having success helps it stay in Green Bay."

But the direct benefits are rather scant, consisting only of an invitation to the annual meeting. The shares don't help fans get hold of coveted seat licenses, for which a team spokesman said there is a 93,000-person waiting list. The shares don't trade on an exchange, and they aren't transferable, except to family mem-

Please turn to the next page

## Packers Sell Stock in Team

*Continued from the prior page*  
by gift or in the event of death.

The team concedes in its 12-page offering document that the stock "does not constitute an investment in 'stock' in the common sense of the term," but it implored fans to invest anyway, to help keep crowd noise in Lambeau and to "maximize our home-field advantage."

Peter Duffey, a 25-year-old Wauwatosa, Wis., resident, acknowledged the conditions of the sale indicated "you're just getting a piece of paper, not much more than that," but said it was worth it because "I've grown up

being a fan of the Packers and loved them all my life."

Mr. Duffey said his parents and sister also bought one share each on Tuesday morning. His parents plan to reimburse his purchase as a Christmas present.

Boulder, Colo., resident Mike O'Connor, a vice president at apparel company Pearl Izumi, said he plans to purchase a share for his son. "It represents Green Bay and the Packers and all the great things that go along with that."

And the financial benefits? "It's all sentimental value to me," he said.

—Matthew Jarzemsky  
contributed to this article.

WSJ Dec 7, 2011

# Boomers To Start Mandatory 401(k) Exit

By VIPAL MONGA  
AND SARAH KROUSE

The largest generation in U.S. history has to start pulling its retirement money this year, kicking off a mandatory movement of cash that could total hundreds of billions in the coming decades.

U.S. law requires anyone age 70½ or older to begin annual withdrawals from their tax-sheltered retirement accounts and pay taxes on those distributions. The oldest of the nation's 75 million baby boomers cross that threshold for the first time this month, according to a U.S. Census Bureau estimate of when that demographic group began.

The obligatory outflows from 401(k)s and IRAs are expected to ripple through the U.S. economy, stock market and a money-management industry that relies heavily on fees from boomers' tax-sheltered savings plans and assets.

Boomers hold roughly \$10 trillion in tax-deferred savings accounts, according to an estimate by Edward Shane, a managing director at Bank of New York Mellon Corp. Over the next two decades, the number of people age 70 or older is expected to nearly double to 60 million—roughly the population of Italy.

Firms that manage 401(k) plans are trying to persuade clients to reinvest their withdrawals in other products rather than spending the cash or donating it to charity. While many Americans are forced to start using their retirement savings before the 70% threshold, experts say retirees often try to draw on tax-sheltered funds last. The forced withdrawals are another pain point for many traditional money managers already struggling to keep some clients from shifting into lower-cost index-tracking mutual funds.

Many hope to offset the required distributions with inflows from millennials, people

in their 20s and 30s—who recently became the largest living generation, even though boomers, at their peak, were more populous.

Savers, meanwhile, are debating what to do with their cash as they wrestle with tax bills triggered by required distributions and worry about outliving their assets. On average, men and women who turned 65 in 2015 can expect to live a further 19 and 21.5 years respectively, according to the U.S. Social Security Administration's most recent life-expectancy estimates; those post-65 expectancies are up from 15.4 and 19 years for those who turned 65 in 1985.

Jack Weaver, a retired biopharmaceutical-product developer, turned 70 in late 2015 and had to pay taxes on his first required payout of \$31,000 last year. "It's unwanted income," he said. He reinvested the money and says his wife plans to do the same when she takes her first distribution this year.

The rise of the 401(k) is linked with the surge in U.S. citizens born after the end of World War II. Boomers, defined by the U.S. Census Bureau as people born in the 18 years beginning in mid-1946, embraced tax-deferred retirement accounts and made them a widespread savings tool in the 1980s

and 1990s. The plans largely replaced traditional pensions and helped create a multitrillion-dollar industry supporting hundreds of investment firms and financial planners.

Contributions to tax-deferred retirement plans outnumbered withdrawals through much of the 1990s and 2000s. That flow began to reverse as boomers entered their retirement years earlier this decade.

Investors pulled a net \$9 billion from workplace retirement-savings plans in 2013, according to the Labor Department. In 2014, the withdrawals jumped to a net \$24.9 billion. Full-year information for 2015 from the Labor Department isn't yet available, but large mutual-fund companies that manage the bulk of U.S. retirement assets say outflows continue to rise. Fidelity Investments expects 100,000 customers to take their first required distributions in 2017, up from 91,000 in 2016.

The withdrawals thus far are small compared with the roughly \$15 trillion parked in U.S. tax-deferred retirement plans, according to a September 2016 estimate by the trade group Investment Company Institute. Brian Reid, chief economist at ICI, said asset gains could help cover some of the amounts retirees would have to withdraw.

Still, distributions are ex-

pected to grow exponentially over the next two decades because of a 1986 change to federal law designed to prevent the loss of tax revenue. Congress said savers who turn 70½ have to start taking withdrawals from tax-deferred savings plans or face a penalty. Specifically, retirees who turn 70½ have until April of the following calendar year to pull roughly 3.65% from their IRA and 401(k) funds, subject to slight differences in the way the funds are treated by the Internal Revenue Service. Then they must withdraw an increasing portion of their assets every year based on IRS formulas.

The penalty for not taking distributions on time is a 50% tax bill on funds the retiree failed to withdraw.

The required distributions could come as a surprise to many boomers, said Alicia Munnell, director at Boston College's Center for Retirement Research. "Individuals look at the pile of savings and think that's their whole nest egg, not that they'll have to pay some amount of that to the government," she said. "It's a very big deal when people realize they only have two-thirds or three-quarters of what they thought they had."

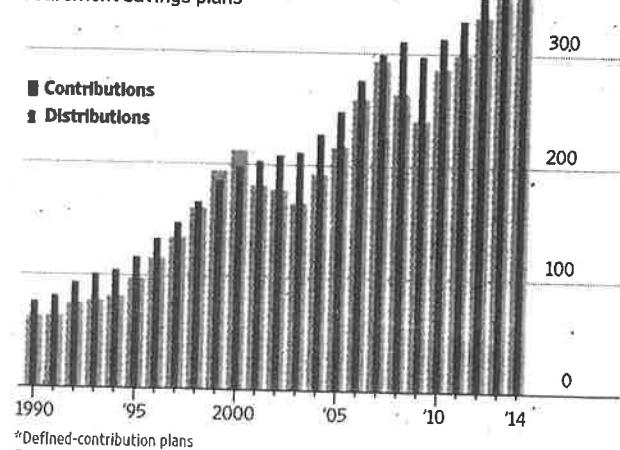
Bronwyn Shone, a financial adviser in Pleasanton, Calif., said many of her clients aren't aware of their legal obligation to take distributions. "I think some people thought they could let the money grow tax-deferred forever," she said.

The outflows aren't a surprise to most asset-management firms but could force some dramatic changes. Firms will have to lower fees and offer more services to persuade retirees to keep their savings at the firms, said Walt Bettinger, chief executive of brokerage firm Charles Schwab Corp. That would lower a firm's profitability by raising costs per customer, he added.

Charles Schwab, which manages some \$208 billion in 401(k) assets, typically has to move 10% of those funds around in any given year due to retirements, deaths or job changes. Mr. Bettinger expects that number to rise to 15% because of required withdrawals.

## Draw Down

Money flowing into and out of U.S. tax-sheltered workplace retirement savings plans\*



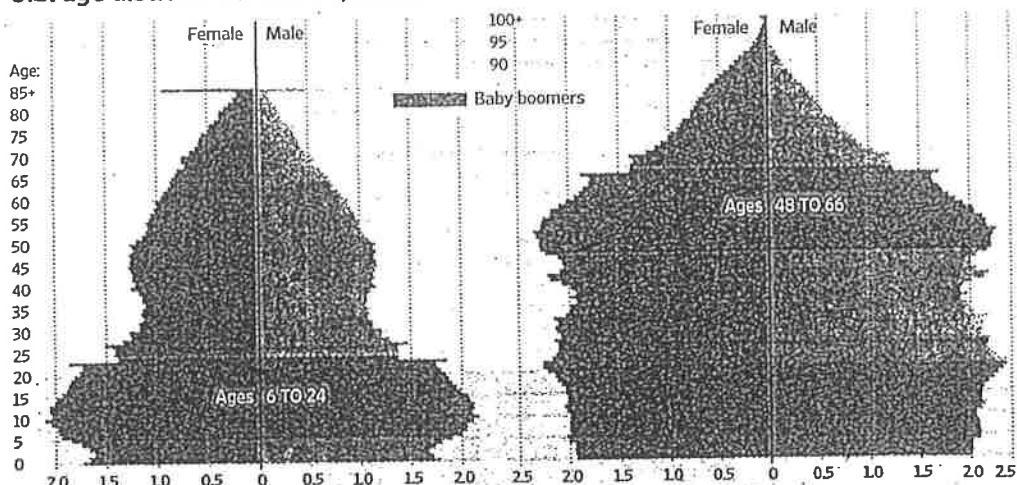
\*Defined-contribution plans

Source: Labor Department

THE WALL STREET JOURNAL

Thursday, January 2, 2014

### U.S. age distribution in 1970, in millions

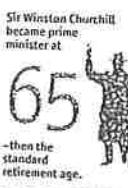
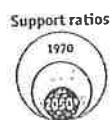


Photos: Associated Press (Keaton, Obama); Agence France-Presse/Getty Images (Shiller, Bush, Gates, Bezos); Reuters (Venter); Getty Images (Clinton); European Pressphoto Agency (Brown); WireImage (Bullock)

Sources: U.S. Census Bureau and William H. Frey analysis of Census Bureau data; Bureau of Labor Statistics (hours worked)

The Wall Street Journal

Number of people over 65 in the OECD  
1970 85m  
2050 350m



Defined-benefit pension holders American private-sector workers\* with no other plan type

1979 62%  
2009 7%

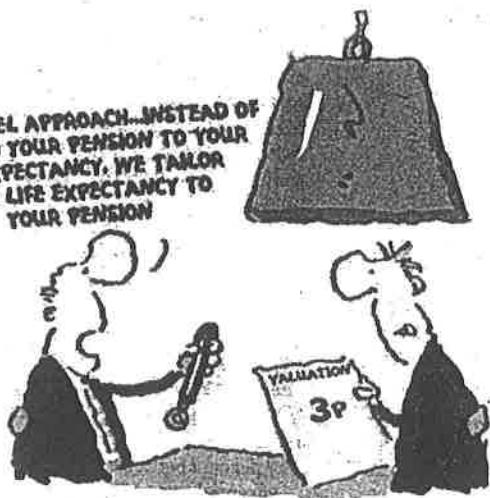
The first American to receive a monthly Social Security cheque was Ida May Fuller.  
She paid in only \$24.75 and got out \$22,888.92  
She died at 100.

The Economist April 9th 2011

#### Life expectancy at 65, male, years

	1940	2007
France	9.90	18.15
United States	11.94	17.52
Britain	10.84	17.40

IT'S A NOVEL APPROACH...INSTEAD OF TAILORING YOUR PENSION TO YOUR LIFE EXPECTANCY, WE TAILOR YOUR LIFE EXPECTANCY TO YOUR PENSION



Tuesday, November 10, 2015

# Social Security Plans Show Shifting Ground

By NICK TIMIRAO

Competing visions over how to fix the shaky Social Security system have opened rifts within both parties over what to do with a program long considered the third rail of American politics.

Several candidates in the Republican presidential field, which is set for a televised debate on Tuesday, are promoting plans that address looming Social Security shortfalls by curbing benefits, primarily for higher-income retirees. The measures could nudge Social Security from a universal old-age insurance system toward a benefit focused on the neediest seniors.

Still, the Republican proposals show how the party is regrouping after a failed bid by then-President George W. Bush a decade ago to augment the program with a new system of private savings accounts. Even these less-ambitious plans are stirring resistance from other GOP candidates attuned to the party's growing reliance on older voters.

Democrats, meanwhile, are backing higher taxes on the wealthy to shore up the program, while tussling over whether benefits should be expanded further. That marks a turn from a few years ago, when President Barack Obama signaled support for slowing the rate of benefit increases as part of a broader overhaul of entitlements.

"This shows how much the

ground has shifted," said Andrew Biggs, who advised Mr. Bush on that proposal and is now a fellow at the American Enterprise Institute, a conservative think tank. "On both sides, it's fair to say the center of gravity on the Social Security debate has moved somewhat to the left."

Social Security has been paying out more in benefits than it collects in tax revenue since 2010. The program ran a small surplus last year due to interest it earned on reserves.

Federal trustees project that by 2022, the program will run a deficit even after accounting for interest earnings, leading Social Security to exhaust its reserves by 2035. Without action from Congress, that would result in across-the-board benefit cuts of more than 20%.

Some Republicans propose curbing benefits for future retirees. Several candidates support gradually lifting the retirement age, which is set to rise to 67 by 2027, and changing formulas used to calculate living-cost adjustments.

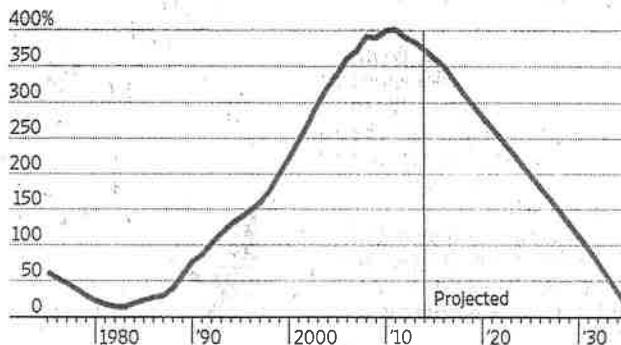
Others go further. New Jersey Gov. Chris Christie would reduce benefits for retirees who earn more than \$80,000 a year in non-Social Security income. Benefits would phase out entirely for those who make \$200,000 or more.

Social Security already uses a progressive benefit formula that provides slightly larger payouts as a share of earnings to lower-income workers and

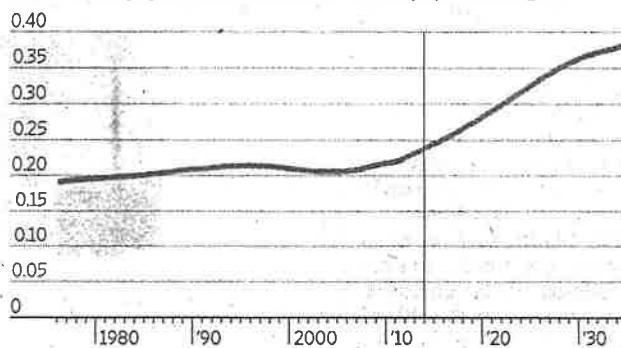
## Demographic Challenge

Social Security will exhaust its reserves in part because the share of Americans reaching retirement age is rising relative to the workforce.

### Retiree benefits trust-fund balance as a percentage of expenditures



### Ratio of the population 65 and older to the population age 20–64



Note: Trust-fund balances are as of the beginning of each year;

Source: Social Security Trustees report

THE WALL STREET JOURNAL

slightly smaller ones for higher-income workers.

"Indirectly, both parties are going to make the system more progressive in the future" to address the looming shortfall, said Eugene Steuerle of the Urban Institute. "The question is, how do you want to go about doing it?"

Among Democratic candidates, Vermont Sen. Bernie Sanders has called for expanding benefits by raising the cap on income subject to payroll taxes, now set at \$118,500. He has criticized former Secretary of State Hillary Clinton for refusing to rule out benefit cuts and declining to embrace

broad benefit increases.

Liberals worry that eliminating benefits for the wealthy would erode the program's universal appeal, creating a class of people with no stake in the program or incentive to support it. Conservatives worry that means tests would create disincentives for older Americans to save or work longer while requiring a more intrusive tax-collection regime to determine who is and isn't eligible for benefits.

Former Florida Gov. Jeb Bush would tweak the formula to make benefits more progressive than they already are. That would reduce benefits for the wealthy, but it would create fewer disincentives for work or saving than an outright means test.

Florida Sen. Marco Rubio has supported proposals to limit the growth of benefits for the wealthy. Curbing benefits for higher earners has support from some conservatives because it is seen as preferable to raising taxes, Mr. Biggs said.

Part of the challenge for the GOP is that its base has aged. Republicans in last year's elections carried voters 65 years or older by 16 percentage points. GOP front-runners Ben Carson and Donald Trump haven't specifically addressed Social Security's finances, but Mr. Trump has warned pushing big changes is politically foolhardy for Republicans.

Republicans have said any changes should be made for future, not current, retirees.

# EUROPE FACES PENSION PINCH

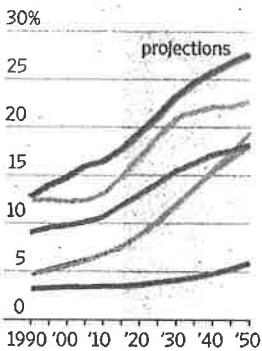
WSJ March 7, 2016

Too few workers contribute to systems, and nations set little cash aside for benefits they promise

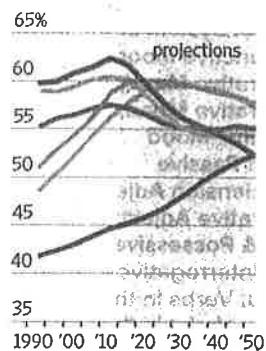
## Pension Predicament

A growing mismatch in numbers of retirees and working-age people poses a financial problem for Europe's state pensions.

The share of Europe's population 65 years and older is and will be larger than in any other region...

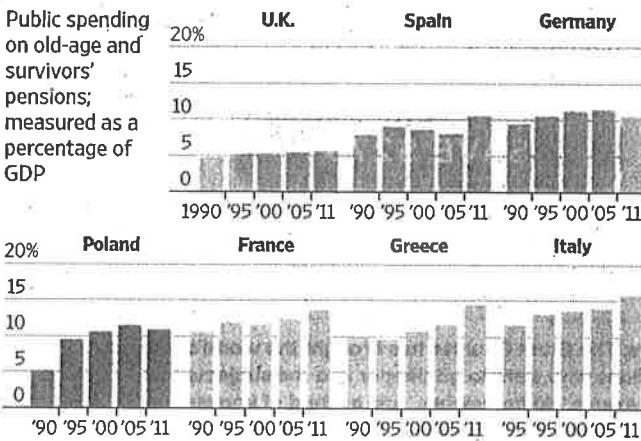


...while the share of Europe's population 20–64 years old is shrinking.



Government spending on public pensions has climbed over the decades.

Public spending on old-age and survivors' pensions; measured as a percentage of GDP



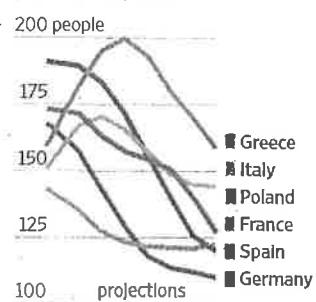
\*U.S., Canada, Bermuda, Greenland and Saint Pierre and Miquelon

Sources: UN Population Division, World Population Prospects, the 2015 Revision (population by age group); Organization for Economic Cooperation and Development (public spending)

THE WALL STREET JOURNAL.

## Fewer Kicking In

Pension contributors per 100 recipients



Source: European Commission, The 2015 Aging Report  
THE WALL STREET JOURNAL.

# The Feeling Is Mutual

## More funds are pumping money into small firms

BY SIMON CONSTABLE

IT USED TO BE that almost all mutual funds invested their capital only in securities of public companies. But that's been changing—which could be good news for some small businesses that have big plans.

Thirty-six percent of firms going public in 2016 received mutual-fund financing before their IPO, according to a recent research paper by Michelle Lowry and Sungjoung Kwon, both at LeBow College of Business, Drexel University, and Yiming Qian at the University of Iowa.

This practice of investing in private firms has become increasingly widespread. Specifically, the authors say, fewer than 15 funds invested in private companies each year through 2000, compared with around 90 unique funds in 2015 and 2016. The research used data from 16 fund families from 1995 to 2016.

"The interest of mutual funds is driven by two things: the possibility of investing in unicorns and the fact that these firms are going public later and later," says José-Miguel Gaspar, professor of finance at Essec Business School in Paris. In other words, mutual funds want to get in early on companies with potential for fast growth.

If this trend continues, it's likely to be good for some, but not all, small businesses. To get an investment from a mutual fund, a company will need to offer something rather special. "I am not sure this is a development for the average startup," says Prof. Gaspar.

On top of that, the level of mutual-fund investment in private firms, while growing fast, is still relatively small and likely to stay that way. "Under the terms of a law from 1940, mutual funds are allowed to own 15% of their assets in pri-

vate firms; guidance that came later suggested 10%," says Richard Evans, professor of finance at the University of Virginia's Darden School of Business in Charlottesville. "They can only put a small allocation in such firms."

But for those companies that can get a mutual fund interested, there is plenty of good news.

**Lower cost of capital.** Prof. Evans notes that the availabil-

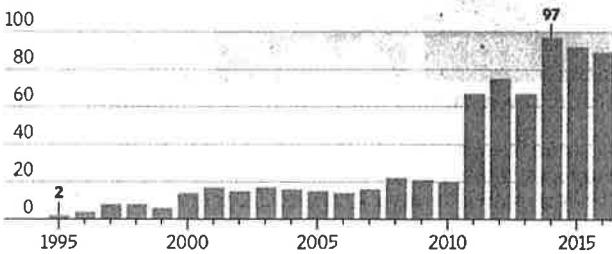
private allows managers to concentrate on growing the business rather than filling in government forms. The longer they stay private, the longer they can avoid the paperwork.

**Help with growing pains.** Any small company that wants to grow will see growing pains, but with a mutual-fund investor, there are seasoned managers available to offer advice.

**IPO prep.** The advice isn't just there when there is a mis-

### Funds Take Note

Across 16 mutual-fund families, which include the largest in the industry, the number of funds owning shares in private firms has increased substantially.



Source: Michelle Lowry, Sungjoung Kwon and Yiming Qian THE WALL STREET JOURNAL.

ity of more capital to fund businesses ultimately means a lower cost of capital for the businesses. It goes back to economics 101—more supply lowers the price of the capital needed. In this case, the potential returns that the investors want to see in the companies they buy will be lower.

**Stay private longer.** "What the paper shows is that having mutual-fund investors shows that companies can stay private 1½ to 2½ years longer than otherwise," says Prof. Lowry.

That allows the firms the potential to grow without the pressure of reporting earnings each quarter. That means that profits can be reinvested into the business and so help boost longer-term growth.

**Less regulatory filing.** Public companies must file many documents each year. Staying

step. Perhaps most important, the advice and coaching can help companies with their debut on the stock market, aka the IPO.

"The transition [from private to public] can be quite a big change," says Sonu Kalra, portfolio manager of the Fidelity Blue Chip Growth Fund. He adds, "The leaders are used to sitting in a room with a few people, whereas when they are public, it will be with a big group of people."

Mr. Kalra says he and his team try to prepare company managers for what to expect when their stock is listed. They hold mock earnings conference calls, and mock roadshows where company leaders will talk with investors.

*Mr. Constable is a writer in New York. Email him at reports@wsj.com.*

# Fidelity Cuts Tech Startup Values

BY ROLFE WINKLER

Mutual-fund giant **Fidelity Investments** took an ax to the valuations of its private technology shares in February, cutting bellwether software startups like Dropbox Inc., Cloudera Inc. and Zenefits by as much as 38% compared with the prior month.

On Wednesday, the Boston-based company released valuation estimates as of Feb. 29 for the holdings in its various mutual funds. The reports are closely watched in Silicon Valley because

they offer among the few public gauges for how closely held startup values are trending.

Fidelity and other mutual-fund firms including T. Rowe Price Group and BlackRock Inc. have spent billions of dollars in recent years buying shares of highflying startups ahead of hopeful initial public offerings. Their money helped inflate valuations, creating a stable of startups valued at \$1 billion or more that now numbers near 150.

But last fall, mutual-fund firms began marking down the values of their stakes after the

stock market dropped and doubts grew about world's economic stability. The markdowns helped sap momentum for startups, making it harder to raise funding at higher valuations and recruit employees eager for stock awards.

A Fidelity spokesman declined to comment.

There are no hard rules for how mutual fund firms value their startup shares, and they often disagree on the per-share price of the same company. They typically estimate valuations using a mix of the startup's finan-

cial information, the market values of publicly traded rivals, and the prices paid previously for the startup's shares.

The Wall Street Journal last month published the Startup Stock Tracker, which keeps tabs on valuations posted by mutual funds for those startups valued at over \$1 billion. The interactive tool has been updated to show February disclosures by rivals Hartford Funds and Principal Funds in addition to Fidelity.

The tracker shows that for 13 startups that have accepted money from mutual funds, at

least one of those mutual funds valued its investment at less than what it paid for the shares.

Among the biggest paper losses was a BlackRock stake in Jawbone, which has declined 69% as of December.

Despite the markdowns, mutual funds on paper still have many big potential winners among their startup investments, including stakes in ride-hailing company Uber Technologies Inc. and room-sharing service Airbnb Inc.

The largest Fidelity mark-

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## FIDELITY

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down in February was in enterprise-software company Cloudera, which Fidelity cut by 38% compared with January to a per-share price in line with other mutual-fund companies.

Other big markdowns include business-software company Domo Inc., down 29%, the first big decline for that company; Web-storage firm Dropbox, down another 20% to a level that all but wipes out the gains on Fidelity's 2012 investment in the company; and health-benefits broker Zenefits, down 25% and now 65% below Fidelity's May 2015 purchase price.

The mutual fund company's stake in electronic-document software firm DocuSign Inc. was reduced 34% compared with December, though Fidelity still shows a 170% paper gain.

Fidelity's data shows it marked down the values of 12 startups tracked by the Journal in February. The write-downs may have been expected after an early February

**Fidelity lifted the valuation of at least four companies during February.**

swoon for public technology shares like LinkedIn Corp. and Tableau Software Inc.

The technology-heavy Nasdaq Composite Index made a strong comeback during the second-half of the month, recovering some of its losses, and the U.S. stock markets have continued to recover this month. On Wednesday, the Nasdaq rose 22 points to 4,869, up nearly 7% since Feb. 29.

Fidelity lifted the valuation of at least four companies during February, including stakes in Airbnb and prepared-meals company Blue Apron Inc., both up 14%; baby-products retailer Honest Co., up 12.7%; and in entrepreneur Elon Musk's rocket

maker, Space Exploration Technologies Corp., up 8.3%.

Messaging company Snapchat Inc. got a vote of confidence from Fidelity in February when the mutual-fund company invested \$175 million at a valuation that was in line with the fund's investment in the company last March. The exact per-share price isn't clear because Fidelity didn't disclose its latest total shareholding in the company.

# Fidelity Ends Fees on 75 Funds

By SARAH KROUSE

**Fidelity Investments** is removing short-term trading fees for 75 funds, the latest move by the mutual-fund firm to adapt to the growing popularity of low-cost exchange-traded funds.

These redemption fees, which are charged to mutual-fund customers who withdraw their money within a given time horizon, are paid back to the fund, which benefits remaining shareholders.

In addition to removing these fees from several funds, the Boston money manager is expanding the number of mutual-fund transactions that are exempt from redemption fees.

These fees have existed to protect shareholders by deterring short-term trading. For fund managers, they help guarantee a more stable asset base that allows them to buy and sell when they feel prices are attractive, rather than worrying about meeting large withdrawal requests.

"We're comfortable removing redemption fees on those funds because of the nature of

their investment universes and the broad spectrum of ETFs available for investors with short-term investment horizons," spokeswoman Sophie Launay said in an email.

The funds continue to have rules put in place in 2004 that prohibit excessive trading within a three-month period, she said.

Fidelity believes these funds are now less likely to be targeted by short-term traders because of the growth of ETFs, which trade on exchanges like stocks but track the performance of baskets of securities.

These low-cost ETFs are increasingly used by investors for short-term exposure to specific asset classes and sectors.

But their growth has posed a challenge for traditional mutual-fund managers. Investors pulled \$242.6 billion from actively managed U.S. stock mutual funds in the first 11 months of the year, according to Morningstar Inc., while U.S. stock ETFs pulled in nearly \$100 billion in net new money.

"Money is moving from mutual funds to ETFs for the liquidity benefits," said Todd

Rosenbluth, director of ETF and mutual-fund research at CFRA. "Mutual-fund companies would like to recoup some of that money."

However, he said there are some risks to fund firms removing redemption fees.

"It's other shareholders that are potentially negatively im-

fe of 1% of the amount redeemed for shares held for fewer than 30 days. The Fidelity Growth Strategies Fund charged a fee of 1.5% of the amount redeemed for shares held for fewer than 90 days.

The list of Fidelity funds that will no longer charge a redemption fee includes a mix of actively managed and index-tracking funds across a range of sectors.

It includes Fidelity Mid-Cap Stock Fund, Fidelity Total Market Index Fund, Fidelity Growth Strategies Fund, Fidelity International Index Fund, Fidelity Global Balanced Fund, Fidelity Overseas Fund, Fidelity Worldwide Fund and a number of its "Select" brand sector funds.

"This is a unique and fairly aggressive move on their part," said Jim Lowell, editor of Fidelity Investor, an independent newsletter about Fidelity and its funds.

He added that the move could help make some Fidelity funds attractive at the end of the year when many financial advisers and individual investors buy and sell shares in mutual funds for tax purposes.

*The fees existed to protect shareholders by deterring short-term trading.*

## Buttonwood | The Big Squeeze

**The fund-management industry looks poised for further consolidation**

MAKING money yourself from investing other people's has been a good business for over a century. Asset managers established a key principle early on: they could charge an *ad valorem* fee on the amount they oversee. So when markets go up, their fees go up.

But as the title of a recent London Business School conference indicated, investment management is "an industry in disruption". Abhijit Rawal of PwC, a consultancy, described the sector's problems as the "four Rs": returns are low; revenues are being squeezed; regulations are being tightened; and the robots are coming to take away business.

Plenty of potential for growth remains, as workers save for retirement. But the industry faces the same sort of cut-throat competition that technology has caused elsewhere. The oldest challenge comes from index trackers, funds that try simply to match the performance of a benchmark like the S&P 500. It took many decades for such "passive" funds to become widely accepted, but they are rapidly gaining market share. Vanguard, a big passive manager, received more than half of all global fund inflows last year.

Big tracker funds can drive down fees through economies of scale. The expense ratio for Vanguard's S&P tracker is just 0.04% of its assets. The average active American equity fund, which tries to beat the index, charges 0.8%. Such fund managers may claim they can outperform the market but in practice few do so consistently. Over the 15 years to the end of December 2016, less than 8% of American equity funds managed that feat. As an old quip has it, "you make your money working in active management but invest the proceeds passively."

Some managers think they can beat the market by backing certain types of



company: those that look cheap on valuation measures such as asset value or dividend yield, say. But even here technology is eroding the case for active management. Computer programs can select stocks on the basis of such criteria at low cost. These "smart beta" funds are gaining ground. The result is that average fees are being dragged down across the industry. According to the Investment Company Institute, a group that represents fund managers, the average expense ratio of American equity mutual funds, weighted by assets, fell from 0.99% in 2000 to 0.68% in 2015.

One reason why high-cost funds have survived for so long is the way that savings products are sold. Many retail investors rely on brokers to advise them; these brokers are often paid commissions or fees by fund managers. These are then passed on to clients in the form of higher management fees. Passive funds do not offer such inducements, so they used not to get recommended. But regulators have been cracking down on such arrangements: Britain stopped these payments in 2013. Trackers have made strong gains since then.

A new disruptive element is the arrival

of "robo-advisers", which offer investors low-cost, diversified portfolios based on their aims and risk profiles. These are popular with younger investors, who are used to buying products online.

Another challenge for fund managers is a change in the corporate-pensions market. Fewer companies are offering defined-benefit (DB) pensions, which are linked to a worker's salary; new employees now have a defined-contribution (DC) pension, the benefits of which are not guaranteed. Employers offering DB pensions need to generate a high return to keep contributions down, so many tend to use specialised "boutique" managers. But DC plans often offer a default fund, chosen by most employees; these usually employ a more limited range of fund managers. The market tends to be concentrated in the hands of big fund-management groups and insurance companies, which can handle the administration of the scheme as well as the investing.

The result is that the industry seems bound to consolidate. A spate of recent mergers of big fund managers has included one between Henderson, an Anglo-Australian firm, and Janus, an American one. There is plenty of scope for the sector to thrive, if it adapts. It seems likely that retiring baby-boomers will rely more on their own resources, and less on the state, and those assets will need managing. Many investors will opt for multi-asset funds, which own equities and bonds; these are less vulnerable to index-tracking because there is no obvious benchmark. And plenty of people will want the reassurance of speaking to a human being, rather than rely on robo-advice. The challenge for fund managers will be to provide it all at a reasonable cost.