

Eich, Frank

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The importance of defined-benefit occupational pension schemes in selected OECD countries

Pension Corporation Research

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The importance of defined-benefit occupational pension schemes in selected OECD countries

August 2010

Dr Frank Eich

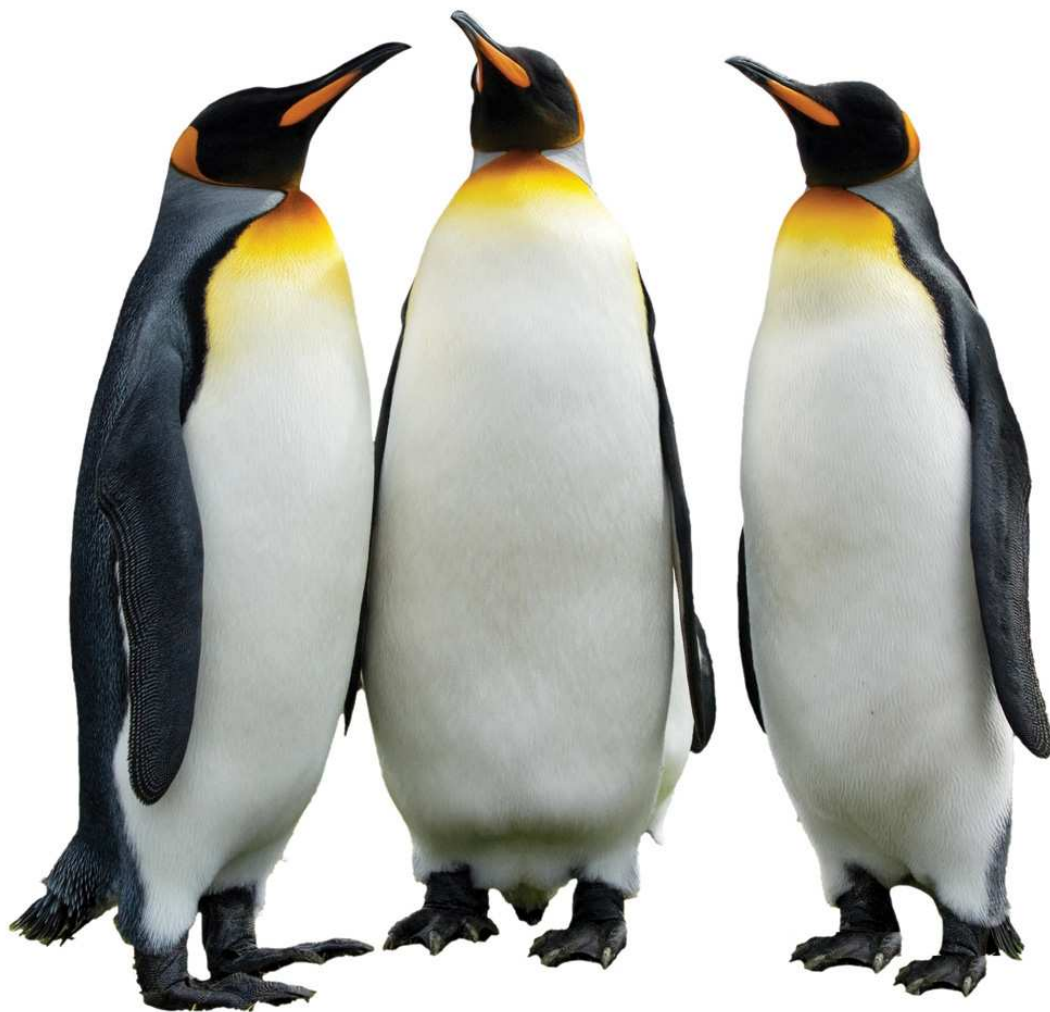


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Key points

- Pension provision to society as a whole is based on three pillars: the first pillar is state (statutory) social security, the second occupational pensions (defined benefit and defined contributions) and the third private pension savings.
- The relative importance of occupational pensions depends on how well the first and third pillars are developed. This study of pension systems in English speaking and western European OECD countries shows that the first pillar remains the mainstay of pension provision in many countries, complemented by occupational and private pensions.
- Most workers are members of some type of occupational pension scheme. In Australia, Denmark, Iceland, the Netherlands, New Zealand, Sweden and Switzerland these schemes are (quasi) mandatory, elsewhere they are voluntary. In countries with voluntary membership, scheme coverage varies between 5.6 per cent (Luxembourg) and 64 per cent (Germany).
- However, coverage says little about the role occupational pension schemes play in providing income in retirement. In Western Europe, occupational and personal pensions account for more than half of all pensioner incomes only in the Netherlands and Ireland. Elsewhere they account for between a tenth and fifth though this is projected to increase over the coming decades as governments try to contain future increases in state pension spending.
- Within the subset of countries in which occupational pensions matter, the role of private sector defined benefit (DB) pension schemes varies widely. In some, DB schemes remain open to new members and new accruals; in others, they are mainly a legacy issue affecting relatively few, mainly larger, businesses.
- The country analysis shows that private sector DB occupational pensions are a legacy issue in Australia, which moved to funded mandatory DC pensions a generation ago. The US has also more or less made the transition from DB to DC, while funded DB schemes are being closed in the UK and Canada. In contrast to Australia, no mandatory DC schemes have been established in the UK.
- Funded DB pension schemes remain important in the Netherlands, though there are challenges. In Germany, DB pension promises have historically been backed by book reserves but explicit funding is becoming more common. Swiss occupational pensions are officially defined contribution but *de facto* defined benefit as the return is fixed by the government.
- In those countries in which occupational pensions have up to now not played an important role, it is mainly DC schemes which are being developed to complement state pensions in the long term.

Executive summary

This paper discusses the role which (funded) defined benefit private sector occupational pension schemes play in national pensions in a sub-group of OECD countries. The paper shows that in the majority of countries under consideration statutory (state) pension schemes are the main if not only source of income in retirement for most people, with occupational pensions only playing at most a minor role. In several countries private sector occupational pension schemes do play an important role in providing pensioner incomes though. In these countries there has generally been a shift from DB to DC pensions, with the risks associated with pensions moved from businesses to individuals. Australia, for example, shifted from DB to compulsory DC pensions a generation ago, leaving only a few major businesses with any sizeable DB pension liabilities now. The US has undergone a similar shift though there is no compulsion. In the UK the economic and financial crisis has accelerated the closure of existing DB pension schemes and dealing with the legacy of DB pension liabilities is becoming a major issue. The picture is similar in the Netherlands and Ireland. The paper also shows the diverging DB arrangements in the private and public sectors, with governments in a number of countries continuing to offer (unfunded) DB pension promises when they have become less popular in the private sector.

i. Introduction

This paper surveys the role of defined-benefit (DB) occupational pension schemes within national pension arrangements in English-speaking and western European OECD countries. The list of countries covered is as follows:

Australia
Austria
Belgium
Canada
Denmark
Finland
France
Germany
Iceland
Ireland
Italy
Luxembourg
Netherlands
New Zealand
Norway
Portugal
Spain
Sweden
Switzerland
United Kingdom
United States

The three pillars of
pension provision

Pension arrangements are generally classified into three groups, the so-called pillars. The first pillar of pension provision represents the state social security system. The second pillar comprises occupational pensions (defined benefit and defined contribution based), while the third pillar represents private pension savings.

The relative importance of occupational pensions will depend on how well developed the other two pillars – state (statutory) social security and personal pensions – are in a country. In some countries social security pensions continue to provide the mainstay of income in retirement, with occupational or private pensions providing at most a small complement. In other countries the state's role in pensions is limited to providing a social safety net to avoid pensioner poverty, with pensioners expected to receive their income in retirement mainly from occupational and/or private pension sources.

Over the last decade, pension reforms have been high on the political agenda in most countries. Faced with a rapidly ageing population, governments – in particular those in Europe – introduced reforms, aimed at slowing down projected increases in state pension spending with the overall aim of ensuring the long-term sustainability of the public finances. With this in mind, legal retirement ages were increased to compensate at least partly for the expected increase in longevity, while replacement rates were reduced. To ensure pension adequacy, these reforms were generally complemented by efforts to encourage other types of pension provision, be it occupational or – more likely – private pensions. In most countries the pensions landscape is thus in a state of flux and is likely to remain so in the future.

Within occupational pensions, one has to distinguish between defined benefit and defined contribution schemes. Across the OECD countries there has been a gradual shift away in the private sector from defined benefit to defined contribution schemes as businesses increasingly tried to limit the exposure to pension-related risks such as longevity risk, investment risk or inflation risk. With DC schemes, these risks now reside with the individuals. In some countries this shift is more or less complete; others are still in the midst of it. In the public sector, occupational DB pension schemes have proved to be

more resilient. A key reason for the diverging trends in the private and public sectors is that DB pension schemes generally have to be funded in the former (reflecting the implementation of international accounting standards into national frameworks), while governments in many countries have opted to continue to finance future pension payments with future tax revenue. In other words, in many countries occupational DB pension schemes for government employees are often run on a pay-as-you-go (unfunded) basis.

This paper focuses mainly on funded private sector defined-benefit schemes. It provides a snapshot of the role of these schemes. In some countries they still play an active role, in others they mainly exist as a legacy issue, involving few active scheme members in the labour force. Section ii provides a general discussion, while Section iii discusses specific national characteristics country by country. Section iv concludes.

ii. Overview of coverage and adequacy

To gauge the relative importance of occupational pension schemes, a useful first step is to establish how widespread (i.e. coverage) these schemes are. Table 1 shows the percentage of employees who are members of mandatory or voluntary occupational pension schemes. The table shows that in all the countries under consideration, individuals are members of (quasi) mandatory or voluntary pension schemes. In nearly a third of the countries (seven out of 20), the schemes were (quasi) mandatory.

The coverage of occupational pension schemes varies widely across countries...

Table 1: Coverage of occupational pension schemes by type of plan (per cent)

	Mandatory/quasi-mandatory	Voluntary
Australia	85 ¹	18.8
Austria		13.9
Belgium		55.6
Canada		39.4
Denmark	>90.0/76.1 ²	
Finland		8.7
France		15
Germany		64
Iceland	>90.0	
Ireland		42.9
Italy		10.6
Luxembourg		5.6
Netherlands	>90.0	
New Zealand		13.0/32.6 ³
Norway	>90.0	60
Spain		8.7
Sweden	>90.0	
Switzerland	>90.0	
United Kingdom		47.1
United States		46

¹ Refers to occupational and personal pensions. ² First figure refers to ATP, second figure to DC schemes. ³ Second figure refers to Kiwi Saver.

Source: *Pensions at a glance 2009, OECD*.

What Table 1 does not show is what role occupational pension schemes play in securing adequate pensions as it does not say anything about the values involved. For example,

everybody could be a member of a mandatory pension scheme; however, if it only paid out £5 per month in retirement, then its role would be rather limited.

...and in only a few are these schemes a significant source of pensioner incomes

The relative importance of the three pillars of pension provision for the western European OECD countries is shown in Table 2. It shows the share of pensioner income derived from the state (statutory) unfunded pension, statutory funded, and occupational and personal pensions. These shares are projected to change over time in a number of countries as a result of the policy changes mentioned above. The theoretical figures have been calculated for a hypothetical worker retiring at aged 65 years after 40 years of working on average wage, with real rate of return assumed to be 2 ½ per cent per year net of charges. Ireland and the Netherlands were the only two countries in which occupational and personal pensions were more important for this hypothetical person retiring in 2006 than the state pension – by 2046 it will only be in the Netherlands. In Sweden and the United Kingdom occupational and personal pensions were also significant, accounting for nearly a quarter of the replacement rate. In around half of the countries the state scheme provided all the income replacement in retirement.

Table 2: Contributions of pension schemes to theoretical replacement rates (per cent, base case¹)

	New pensioners (retiring in 2006)			Future pensioners (retiring in 2046)		
	Statutory PAYG scheme	Statutory funded scheme	Occupational or personal pension	Statutory PAYG scheme	Statutory funded scheme	Occupational or personal pension
Austria	100			100		
Belgium	91		9	80		20
Denmark	84	6	10	75		25
Finland	100			100		
France	100			100		
Germany	90		10	75		25
Ireland	46		54	57		43
Italy	100			80	20	
Luxembourg	100			100		
Netherlands	40		60	40		60
Spain	100			100		
Sweden	78		22	65	12	23
United Kingdom	78		22	68		32

¹ Based on theoretical replacement rates for a hypothetical worker retiring at aged 65 years after 40 years of working on average wage, with real rate of return assumed to be 2 1/2 per cent per year net of charges.

Source: *Privately managed funded pension provision and their contribution to adequate and sustainable pensions, European Union's Social Protection Committee, 2008.*

Policy changes over the last decade are expected to lead to a shift in the shares, with Belgium expecting a fifth of all replacement income to come from occupational and personal pensions by 2046 (up from less than a tenth in 2006), while Denmark and Germany expect the shares to rise from 10 per cent in 2006 to a quarter. Note that these projections were done prior to the economic and financial crisis.

The theoretical replacement rates presented in Table 2 hide substantial differences across the income groups. In the UK, for example, those on low to modest incomes will receive almost all their income in retirement from the state, while for those further up the income scale occupational and personal pensions will become increasingly important. For those on the highest incomes, the Basic State Pension will only provide a small part of their retirement income.

Table 3 shows the value of pension fund assets in terms of GDP in 2007 in the selected countries. These cover occupational and private pension funds, though most of it will be in occupational funds.¹ While the economic and financial crisis has had a very substantial adverse impact on the value of pension funds (from which they have generally not fully

¹ In most countries occupational pension schemes are much more common than personal pensions; see *Pensions at a glance 2009, OECD, 2009.*

recovered yet²), the 2007 values (expressed as shares of GDP) nonetheless give an idea of the relative importance of “explicitly” funded pensions in a country. For example, in Belgium or Germany the value of assets was less than 5 per cent of GDP though more than half of Belgians and nearly two thirds of Germans had an occupational pension. By contrast, in the UK the value of pension fund assets was 78 per cent of GDP in 2007 though less than half of employees had an occupational pension. This reflects the relative generosity of occupational pensions across these countries but also to a certain extent different funding approaches, with many German businesses for example still funding their supplementary pension benefits through book reserves on their balance sheet rather than through assets held in legally separate funds.

Table 3: Assets in private pension funds and public pension reserves (per cent of GDP, 2007)

	Private pension funds	Public pension reserves
Australia	105.4	4.9
Austria	4.8	
Belgium	4	
Canada	55.3	7.9
Denmark	32.4	0.3
Finland	71	
France	1.1	1.9
Germany	4.1	
Iceland	134	
Ireland	46.6	11.5
Italy	3.3	
Luxembourg	1	
Netherlands	138.1	
New Zealand	11.1	7.8
Norway	7	5.2
Spain	7.5	4.5
Sweden	8.7	31.7
Switzerland	119.2	
United Kingdom	78.9	
United States	76.7	16.6

Source: *Pensions at a glance 2009*, OECD.

Table 3 shows that private pension funds were particularly large in Australia, the Netherlands and Switzerland – in these countries their value comfortably exceeded the value of GDP in 2007. In other countries the value of private pension funds was modest. In Luxembourg or France, for example, it was equivalent to only 1 per cent of GDP. Table 3 also shows that the degree of public sector pension funding varies across countries. In half of the countries in question, no public sector funds existed at all, in only three countries did the allocated funds amount to more than 10 per cent of GDP. This picture reflects the fact that in most countries public sector pensions are on a pay-as-you-go basis, with future outlays financed by future tax revenue.

iii. Country-by-country discussion

Tables 1 to 3 give an overview of the coverage and generosity of funded DB pension schemes in the selected countries. This section provides more country-specific information, including on the general structure of the pension system, recent policy developments, key differences between private and public sector occupational schemes or whether DB pensions still play an active role in the private sector or are mainly a legacy issue nowadays.

² For a discussion of what has happened to pension funds since 2007, see *Pension fund assets struggle to return to pre-crisis levels*, OECD Pension Markets in Focus Issue 7, July 2010.

Australia

Australia moved from DB to DC schemes a generation ago...

In Australia pensions are generally delivered through a tax-funded means-tested age pension and – going forward - the superannuation guarantee, a compulsory employer contribution to private (generally DC) superannuation savings which was introduced in 1992. Prior to 1992, superannuation arrangements had existed for many years negotiated by the trade unions. Even though Australia moved to a pre-dominantly DC-based occupational pension model a generation ago,³ DB pension promises remain an important legacy issue for many, mainly large businesses. For example, BHP Billiton, Rio Tinto, Woolworths, QBE Insurance, Qantas or the major banks Westpac, Commonwealth Bank, National Australia Bank and ANZ continue to have DB pension schemes, though they are generally closed to new entrants or “deferreds” and mainly contain promises dating back many years.⁴

More generally though, funded occupational DB pension schemes play only a small role. As such the OECD believes that the “...*the implications for the Australian pension system [of the new accounting standard which was introduced in 2006 and which is largely consistent with IAS 19]...are quite limited, as DB pension funds represent only a small part of the overall market...*”⁵ The public sector used to offer DB pensions on a pay-as-you-go basis but since 2005 new entrants have generally joined DC schemes similar to those offered in the private sector. The Australian government launched the “Superfund” in 2006 to pre-fund some the future expenditure on DB public sector pensions.

Austria

...while occupational schemes are a relatively recent phenomenon in Austria and Belgium

The Austrian pension system consists mainly of a pay-as-you-go defined-benefit public scheme with an income-tested top-up for low-income pensioners. Occupational pensions do not play a significant role in Austria. Until 1990 occupational pensions were generally financed internally through company book reserves. The introduction of defined-contribution *Pensionskassen* (pension funds) in 1990 changed that as the assets are now kept legally separate from the sponsoring company. In 2007 there were 7 multi-employer and 12 single-employer pension funds, covering together about 13.2 per cent of the workforce.

Belgium

The Belgium state pension system has two components: an earnings-related public scheme with a minimum pension and a means tested safety net. These are financed on a pay-as-you-go basis.

Voluntary occupational pensions and private pensions are a relatively recent phenomenon in Belgium, with the relevant legal framework only being implemented in 2004. Since then industry-wide pensions schemes can be established as a result of collective bargaining between employer associations and the trade unions. Each industry can only have one pension scheme, which can be either a pension fund or an insurance-based arrangement (the law restricts the use of book reserves as an option). Around 70 per cent of pension plan members have an insurance-based arrangement. Employers are obliged to join these schemes unless the collective agreement allows them to contract out. Nowadays, more than half of employees are members of these DC occupational pension schemes but the accumulated assets are still small and the role of the schemes remains limited.

As in many other countries, there are a number of businesses (e.g. Belgacom) with notable DB pension liabilities though.

³ Australia moved from DB to DC 25-30 years ago. See *Workplace pensions: a new hope?*, Association of Consulting Actuaries, Placard Issue 26, January 2010, page 7.

⁴ *Australian companies face pension fund shortfalls*, www.theaustralian.com.au/business/pension-fund-shortfalls/story-e6frq8zx-1225699572953, 16 April 2009.

⁵ *Reforming the valuation and funding of pension promises: Are occupational pension plans safer?*, Juan Yermo, OECD Working Paper on Insurance and Private Pensions No. 13, 2007, page 13.

Canada

The Canadian picture is complicated by the country's federal structure...

The Canada Pension Plan (CPP) offers a universal flat-rate benefit, which can be topped up with an income-tested benefit, and earnings-related public schemes. It operates nationwide with the exception of Quebec, which has its own plan (QPP). Close to 40 per cent of employees are covered by occupational pension schemes, around 80 per cent of these were defined-benefit final salary plans. Trends and the public debate seem to be similar to those in the UK, with DB schemes apparently quickly disappearing in the private sector while remaining popular in the public sector (where they are unfunded).⁶ Private sector DB pension schemes are also generally underfunded. Table 4 provides a more detailed breakdown of the coverage of occupational pensions.

Table 4: Occupational pension coverage of the paid labour force (per cent, 2005)

Sector	DB	DC	Total
Public	78	6	84
Private	18	7	26
Total	31	7	38

Source: Ontario Trends in Occupational Defined Benefit and Defined Contribution Pension Coverage, Informetrica Limited, 2009.

The Canadian pension landscape appears to be made more complex by occupational pension plans on the provincial level. For example, Ontario has its own framework for occupational pensions (Ontario Occupational Pension System), which complements the CPP, and it is up to the provincial governments to develop these frameworks. For example, "The Ontario Expert Commission on Pensions was established in November 2006 by the...then Minister of Finance, to "examine the legislation that governs the funding of defined benefit plans in Ontario, the rules relating to pension deficits and surpluses, and other issues relating to the security, viability and sustainability of the pension system in Ontario."⁷

Integrating these regulations appears to be a challenge. As Hering and Kpessa argue: "... Since the 1990s, the integration of occupational pension regulations across jurisdictions has been on the agenda of governments, regulators, and supervisors in many advanced industrialized countries, mostly at the international level. In Canada, it was on the agenda also at the domestic level, because, in a unique arrangement, employer pension plans are regulated by the provinces....At the domestic level, the Canadian Association of Pension Supervisory Authorities (CAPSA) recently proposed more than 40 principles of pension regulation and supervision, which would lead to more integration across the Canadian federation if they were adopted by the provincial governments...In addition, the government of Ontario, which regulates the large majority of Canadian pension plans, considered the issue of harmonizing regulations in its review of occupational pension legislation..."⁸

Denmark

The Danish three-pillar pension system comprises a tax-financed and means-tested state pension (first pillar), two statutory and one quasi-statutory occupational schemes (second pillar) and voluntary private pension savings (third pillar). In 2006 nearly three quarters of the workforce participated in some type of supplementary occupational pension plan, in other words the second pillar is well developed.

The two statutory pension schemes are the supplementary earnings-related scheme (ATP) and the Special Pension (SP), the latter to be closed down by mid 2010.⁹ The ATP is one of the largest pension funds in Europe with assets of around \$100bn and contribution based. When a particular contribution is made, the scheme manager locks in

⁶ Canada's Pension Predicament: The widening gap between public and private sector retirement trends and pension plans, CFIB, 2007. www.cfib-fcei.ca/cfib-documents/rr3028.pdf

⁷ www.fin.gov.on.ca/en/consultations/pension/report/

⁸ The Integration of Occupational Pension Regulations: Lessons for Canada, Hering and Kpessa, SEDAP Research Paper No. 188, 2007.

⁹ www.atp.dk/X5/wps/wcm/connect/ATP/atp.com/index/privat/SaerliqPension

a certain return so that the individual's retirement income will reflect the sum of guaranteed returns on many separate contributions.¹⁰ In addition there is a "voluntary" occupational scheme, which was introduced by collective agreement by the social partners and compulsory for all relevant companies, making it de facto quasi mandatory. More than three quarters of the workforce contribute to such a quasi-mandatory scheme, which are overwhelmingly defined contribution based. Compulsory and voluntary occupational pension plans must be externally funded either by an insured arrangement or a pension fund. Around a third of voluntary occupational schemes in Denmark are funded using a single company pension fund, the vast majority use an industry-wide pension fund, where all employees in the same industry contribute to a single fund. The company pension fund is playing an ever-diminishing role.

Finland

The Finnish pension system is based on two complementary pension schemes. First, the National Pension is a tax-financed and means-tested public pension providing subsistence level benefits. Second, compulsory earnings-related occupational pension schemes covering the private and public sector play an important role; income from these schemes reduces the amount from the National Pension. The schemes for private-sector employees are partially pre-funded while the public-sector schemes are pay-as-you-go financed (with buffer funds to even out future increases in pension contributions). Voluntary occupational schemes and private pension savings do not play an important role, with only around 15 per cent of the workforce members of such arrangements.

The administration of the occupational schemes is decentralised to private sector pension providers such as insurance companies, company pension funds and industry-wide pension funds. Only some administrative functions for the statutory pension insurance are carried out centrally by the Finnish Centre for Pensions. The earnings-related pension is financed by contributions paid by both employers and employees. The employer takes out pension insurance for the employees with the pension company of its choice. The pension benefits received by the pensioner are calculated on accruals during employment.

The majority of compulsory and voluntary occupational pension schemes are financed by group insurance contracts, with insurance companies holding approximately 85 per cent of all occupational pension assets. These are tightly controlled by a handful of mostly local insurance companies. By contrast, pension funds and foundations play only a minor role; they account for only 15 per cent of voluntary occupational pillar pension assets.

France

The French pension system consists of a state pension currently financed on a pay-as-you-go basis, a mandatory defined-benefit occupational system, and voluntary occupational and personal arrangements.¹¹ Of these three elements the first is by far the most important. Voluntary occupational and personal arrangements are not widespread.

The statutory pension insurance scheme is a compulsory basic social security system, which provides earnings-related benefits for employees in the private sector. In addition, all employees are members of compulsory supplementary plans, which are based on collective agreements. The pension is based on career-average earnings and is calculated using a points system, which takes into account employer and employee contributions, or inflation and earnings trends. The mandatory occupational system is financed on a pay-as-you-go basis from employer and employee contributions.

¹⁰ www.atp.dk/X5/wps/wcm/connect/08606b00495d3fd78702efde6c626197/Faktum_54_uk.pdf?MOD=AJPERES&CACHEID=08606b00495d3fd78702efde6c626197

¹¹ In 1999 the government established a public pension reserve fund (*Fonds des Réserve pour les Retraites*, FRR), which is meant to part finance state pension spending from the 2020s onwards. The government is using the proceeds from the sale of government assets etc to build up the fund.

..., while German arrangements start to resemble more what is seen elsewhere...

Germany

The German statutory public pension system is single tier and earnings-related PAYG. There is a social assistance safety net for low-income pensioners. Over the last decade voluntary private pension savings have been promoted and coverage is nowadays nearly 50 per cent (though per capita levels remain modest). Nearly two thirds of German employees are also members of voluntary occupational schemes, many (especially those of larger businesses) of which are DB.

The most common type of occupational pension is the *Pensionszusage (Direktzusage)*, which is a promise by the employer to pay a pension in the future. It does not have to be based on any pension contributions nor does it have to be funded. In most cases the plans adopt a book reserving approach so that pension payments have to be made out of current expenditure.¹²

Occupational pension promises are virtually fully guaranteed by the *Pensions-Sicherungs-Verein Versicherungsverein auf Gegenseitigkeit (PSVaG)*,¹³ which was set up in the 1970s by private businesses as a private-sector institution without government backing. The set up is similar to the UK's PPF, with corporate pension sponsors paying a levy in return for the PSVaG taking on any pension obligations in case of insolvency. Pension scheme sponsors are generally required to increase pensions in payment either in line with inflation or net earnings growth in the company. However, in exceptional circumstances the corporate sponsor can also decide to temporarily freeze pension payouts in nominal terms.

Independent insurance businesses (*Pensionskassen*) operating in a similar fashion to life assurances and chosen by the employer, are another common type of occupational pension. Close to a quarter of all pensions-related assets are invested in this way. They are supervised by *Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)*, Germany's FSA equivalent.

Since the beginning of the last decade, an increasing number of (especially larger) businesses have established separate pension funds and have moved the pension liabilities out of their balance sheets. This partly had to do with their decision to list on international stock exchanges, foremost the New York Stock Exchange. Siemens, for example, established a separate fund in 2000. Similarly, VW launched such a fund in 2001, which will offer a DC pension in the future to complement the firm's basic DB pension promise.¹⁴ Lufthansa, Hochtief, EON are other examples.¹⁵ Apparently three new funds were set up in 2009.¹⁶ The pension funds are also insured with the PSVaG.

Civil servants and other public sector workers are part of a completely separate pension scheme (they are not even part of the statutory public scheme), which is unfunded.¹⁷

¹² *Melbourne Mercer Global Pension Index – Germany*, Mercer, 2009.

¹³ www.psvag.de/framesets/home1.html.

¹⁴

www.volkswagen.de/vwcms/master_public/virtualmaster/de3/unternehmen/karriere/was_uns_ausmacht/personalpolitik/pensionsfonds.html

¹⁵ By contrast, Deutsche Telekom has only around 16 per cent of its pension liabilities funded externally, with their head of pensions arguing that there are many good reasons to keep these liabilities on the balance sheet, German tax law being one of many. See

www.dpn-online.com/news/fullstory.php/aid/1652/84Die_parit_E4tische_Besetzung_w_E4re_Geschichte_93.html

¹⁶ See www.personaler-online.de/typo3/nicht-im-menue/personalnews/personalernews-details/article/hoehere-pensionsverpflichtungen-durch-substantielle-ertraege-auf-pensionsvermoegen-kompensiert.html.

Towers Watson has calculated that the funding ratio of company-specific pension schemes was 61.3 per cent and 47½ per cent for the DAX and MDAX benchmarks respectively at end 2009. See *Robuste Entwicklung bei Pensionsvermögen in DAX und MDAX Höhere Pensionsverpflichtungen durch substantielle Erträge auf Pensionsvermögen kompensiert*, Towers Watson, German Capital Market Update February 2010.

¹⁷ See *Public sector pensions: Rationale and international experiences*, Frank Eich, Pension Corporation Research, June 2009.

Iceland

In addition to the Icelandic state pension, there are also mandatory occupational pensions for those aged 16 to 70 years. However, it is difficult to classify these as purely DB or DC: *"...The mandatory occupational pension funds are similar to defined contribution funds in the sense that contribution levels have in most cases been stable for a long time at 10 per cent, now 12 per cent. However, there are no individual accounts and the investment risk is borne collectively by the members of the funds...Furthermore, a lifelong old age pension is guaranteed in all cases. The fund's regulations then define the benefit level in every period. Based on rough estimate the balance between defined-contribution pension plans and defined-benefit pension plans are approximately 80 per cent versus 20 per cent. Less than 10 per cent of the occupational pension funds' members belong to a pure defined-benefit pension plan..."*¹⁸

Ireland

The Irish public pension is a basic scheme paying a flat rate to all who meet the contribution conditions. There is also a means-tested pension to provide a safety net for the low-income elderly. In addition, around 43 per cent of employees have an occupational pension plan. Of members working in the private sector, around 50 per cent of these are in defined-contribution and 50 per cent in defined-benefit plans. It is assumed that the defined-benefit scheme is "integrated with the public scheme", meaning that the value of the basic pension is deducted from the entitlement. For defined-contribution occupational plans, the average contribution rate is about 10 per cent of earnings. In addition, around 15 per cent of people have defined-contribution personal plans. According to the Irish Pensions Board, around 80 per cent of all schemes were underfunded in 2009, with its Chief Executive, Brendan Kennedy arguing: in February 2010: *"...the Board is concerned that the investment and funding of too many defined benefit schemes are based on aggressive investment return assumptions and do not take enough account of investment risks and downsides..."*¹⁹

...and underfunding
is a major issue in
Ireland

Most pension plans in the public sector are defined benefit by nature and are on a pay-as-you-go (unfunded) basis.²⁰ When presenting the 2010 Budget in December 2009 the Irish Finance Minister, Brian Lenihan, stressed that accrued entitlements in the public sector would be persevered but that it was likely that future pension increases would be indexed to inflation rather than earnings.²¹

Italy

The Italian pension system is based on notional accounts. Contributions earn a rate of return related to GDP growth. At retirement, the accumulated notional capital is converted into an annuity taking account of average life expectancy at retirement. It applies in full to labour market entrants from 1996 onwards.

There is an additional voluntary, supplementary occupational system. It consists of both open funds and closed collectively agreed funds. The closed funds can be funded by both employers and employees as well as from the TFR. The open funds provide an annuity based on contributions. However, occupational pension coverage remains low at around 11 per cent of employees.

Luxembourg

The relatively generous public pension scheme in Luxembourg covers private and public sector workers and has two components: a flat-rate part depending on years of coverage and an earnings-related part. The two components are financed out of employer and employee contributions, and government transfers. Occupational pensions play a limited role in the Luxembourg pension landscape – their foundations for more widespread coverage were only created in the late 1990s - and have in the past generally been offered to more senior employees only. Companies offering such a plan have three

¹⁸ *The Icelandic Pension System*, Marianna Jonasdottir, Icelandic Ministry of Finance, 2007.

¹⁹ *Review of 2009 published by The Pensions Board*, The Irish Pensions Board, 2010 www.pensionsboard.ie/index.asp?locID=3&docID=658.

²⁰ *Green Paper on Pensions*, Department of Social and Family Affairs, Republic of Ireland, 2007.

²¹ *Ireland 'turning corner' despite cuts*, www.rte.ie/business/2009/1209/budget2010.html

options as to the type of pension vehicle: pension funds, group insurance or book reserve schemes (the latter being the vehicle of choice in the past due to tax reasons). More recently, DC pensions based on unit-link group insurance have become more popular.

Netherlands

The Dutch pension system consists of a flat-rate public scheme and earnings-related quasi mandatory occupational plans which cover 91 per cent of employees. Approximately 94 per cent of the employees in pension funds are covered by a defined-benefit scheme. Occupational pensions are integrated with the public pension system.

The Netherlands has many large industry-wide pension funds set up by the social partners, which hold substantial pension fund assets (see Table 2). They are generally perceived to be relatively well run but as elsewhere have struggled with the funding of future liabilities. The Dutch Central Bank regulates the pension funds and sets funding targets; they currently stand at 105 per cent. Unlike in the UK, pension funds can achieve these funding targets by raising contributions but also by reducing future pension payments or even pensions in payment, thus lowering liabilities. The chosen strategy can and does vary from industry to industry, reflecting specific circumstances.

New Zealand

The state pension system, called NZ Superannuation, was established after the 2nd World War. It closely resembles a citizen's pension – being flat rate and based on a residency test – and is mainly financed on a pay-as-you-go basis. Since 2003 the NZ government has been pre-funding some of the future increases in state pension spending through the NZ Superannuation Fund. The fund is currently still small at around NZ\$ 15bn.²²

Private sector occupational schemes have never been particularly important and have decreased even further in coverage since 1990 to less than 15 per cent of the employed workforce now. Partly to compensate for this decline, the government launched the so-called KiwiSaver scheme in 2007 to encourage private pension saving. Within its first year of operation the scheme achieved coverage of 44 per cent.²³

The situation is different for public sector employees. The Government Superannuation Fund dates back to 1948, when it was established to provide a way for state sector employees to save for their retirement. Contributors make regular contributions to the Fund and in return, on retirement, receive a defined level of income. The GSF Schemes were generally closed to new members in 1992. There are currently some 68,000 members, made up of some 15,000 contributors, 6,000 deferred pensions and 47,000 annuitants. Since 1996, the number of annuitants has exceeded the number of contributors. It is expected that entitlements will continue to be paid by GSF for the next 60 years or so.

According to the Government Superannuation Fund Authority "...the fund's assets are insufficient to cover its projected liabilities, i.e. its commitments to pay future entitlements. The annual shortfall in the cost of entitlements is met by a 'top up' from the government each year....Before the Authority took over in 2001, the Fund was invested entirely in New Zealand fixed interest securities. This kept investment risk to a minimum but it also meant that returns were lower than they might have been over the longer term had the GSF assets been invested in a diversified portfolio..."²⁴

²² www.nzsuperfund.co.nz/index.asp.

²³ In August 2010 the New Zealand government announced that it would set up a working group to study the merits of compulsory pension saving. See www.bloomberg.com/news/2010-08-15/key-says-new-zealand-planning-study-of-compulsory-pension-savings-options.html

²⁴ Government Superannuation Fund Authority at www.gsfa.govt.nz/content/04932c3c-d4bd-4f0f-8f29-9827bdaf8134.html

DB pensions are very well established in the Netherlands and highly aggregated...

Norway

The Norwegian public pension system consists of a flat-rate basic pension and an earnings-related (supplementary) pension. It provides a satisfactory level of retirement income for most. The system is operated by the National Insurance Scheme (NIS), which was established in the 1960s. In 2006 the fund was merged with the Government Pension Fund.

In addition, especially larger employers have been offering DB occupational pension schemes to their members for a long time; the 2001 pension legislation requires these to be fully funded at all times. To strengthen occupational pensions, a mandatory occupational pension system was introduced in 2006. Employers must make a minimum contribution of 2 per cent of earnings to the DC plan - if employers offer a DB scheme instead, the benefits must be at least the same level as the expected benefits under the mandatory arrangement.

Portugal

The Portuguese pension system consists of a dominating earnings-related public pension scheme with a means-tested safety net complemented by voluntary occupational pension plans and personal pension saving arrangements. The supplementary pension market is one of the smallest in Europe.

According to Pensionfundsonline "...company benefit plans are not widespread, with only about 3.7 per cent of Portugal's 4 million workforce being included in occupational pension schemes. Especially large employers, formerly state-owned companies (electricity, telecommunication) and banks with a large staff provide voluntary occupational pension coverage. Only 1 per cent of all Portuguese companies have a pension plan in operation..."²⁵ As in many other countries, there are number of businesses (e.g. Portugal Telecoms) though with defined-benefit pension liabilities.

Spain

Retirement incomes in Spain are generally derived from the public pension system, which consists of a single, earnings-related benefit in the contribution level and a means-tested minimum pension. Given the generosity of the state pension, other types of pension provision - be it occupational or private pensions - are not well developed in Spain.

Around 7 per cent of companies are offering an occupational pension and less than 10 per cent of the workforce is currently covered. Larger businesses are more likely to offer such a pension. Since the mid 1990s external funding of all pension obligations is required (this was achieved in 2002). Occupational pensions remain generally DB in nature even though DC schemes have become more popular in recent years.

Over the last few years there have also been a number of legislative changes to pension funds, covering compliance, funding, investment and administration rules.

Sweden

The first pillar of the new Swedish pension system, which was introduced in 1999, has an earnings-related part based on notional accounts and a smaller part based on contributions. The first pillar is complemented by (mainly DB) occupational pension plans, which cover almost 90 per cent of employees.

The reformed national pension system was set up to be independent from the government's public finances. One consequence of this is that it cannot rely on general taxation to make up any potential funding shortfalls, for example during an economic downturn. This role is played by five state-backed buffer funds (1st to 4th and 6th AP

²⁵ www.pensionfundsonline.co.uk/countryprofiles/portugal.aspx

fund) instead. There are currently talks to consolidate these buffer funds, which together hold around \$100bn in assets.²⁶

With respect to occupational pension schemes, salaried employees will generally be members of the so-called ITP pension scheme, which is based on a collective agreement between the Swedish Confederation of Industry and the Federation of Salaried Employees in Industry and Services. Companies can insure their pension promises with *Alecta pensionsförsäkring* (Alecta) or seek coverage with *Pensionsgaranti* (FPG), which was set up in 1961 as part of the ITP pension scheme and which is a mutual insurance company, owned by the insured companies. *Pensionsgaranti* has nearly 1,500 partners, including most of the companies listed on the Stockholm Stock Exchange.

Switzerland

Switzerland was one of the first if not the first country, which promoted the idea of a three-pillar pension system and today the three pillars contribute almost equally to old-age income. Not surprisingly then, the pension system comprises an earnings-related, mainly PAYG state scheme, mandatory occupational pensions and private (voluntary) pensions. The Swiss voted in favour of a mandatory occupational pension system in 1972 (building on a long tradition of occupational pensions) but passed it into law only in 1985, at which stage occupational pension funds already amounted to 60 per cent of GDP. Despite a population of only seven million, the country has one of the largest pension markets in Europe with an estimated EUR 580 billion in pension fund assets in 2006. It is intended that for most people the combined income from the state scheme and mandatory occupational pensions is around 60 per cent of final working income.

In principle the mandatory occupational pension plans are defined-contribution based; however, the government via its *Eidgenössischen BVG-Kommission* sets the minimum investment return in any given year.²⁷ For example, the legally guaranteed minimum return stood at 4 per cent between 1985 and 2002 but has come down since then. As such there is a degree of certainty regarding the level of future benefit from an individual's point of view. It achieves that by putting the onus on the plan providers to deliver the prescribed minimum return.

The plans cover both the private and public sectors. In the private sector, book reserves or internal funding of pension plans are not permitted; instead separate legal entities keep the pension assets independent from the corporate sponsor's other assets. In contrast to say the Netherlands, the pension fund landscape is very fragmented, with around 2500 funds (of which fewer than 150 are in the public sector) and only a few large scale funds with assets in excess of CHF1bn. In the private sector these funds are either non-profit foundations (*Stiftungen*) or co-operatives.

Unlike in the private sector, public sector funds can be underfunded as long as their public sector sponsor guarantees to make up for any potential shortfall in the future. In March 2010 the *Ständerat* (the chamber representing the cantons) argued that the funding ratio for cantons and local authorities should reach a minimum of 80 per cent over a 40 year horizon, opposing plans by the *Bundesrat* (the federal chamber) for a 100 per cent funding ratio.²⁸

United Kingdom

The British pension system is mainly based on the first two pillars of provision: social security and occupational pensions. Personal pensions do not play an important role. The statutory social security pension is meant to provide a minimum income for those above the State Pension Age, which is currently 65 years for males and will be 65 years for

...while Switzerland has a very large number of quasi DB schemes

²⁶ *Swedish fund merger talk heats up Government task force to start review of AP funds in next 90 days* www.pionline.com/apps/pbcs.dll/article?AID=/20091214/PRINTSUB/312149985

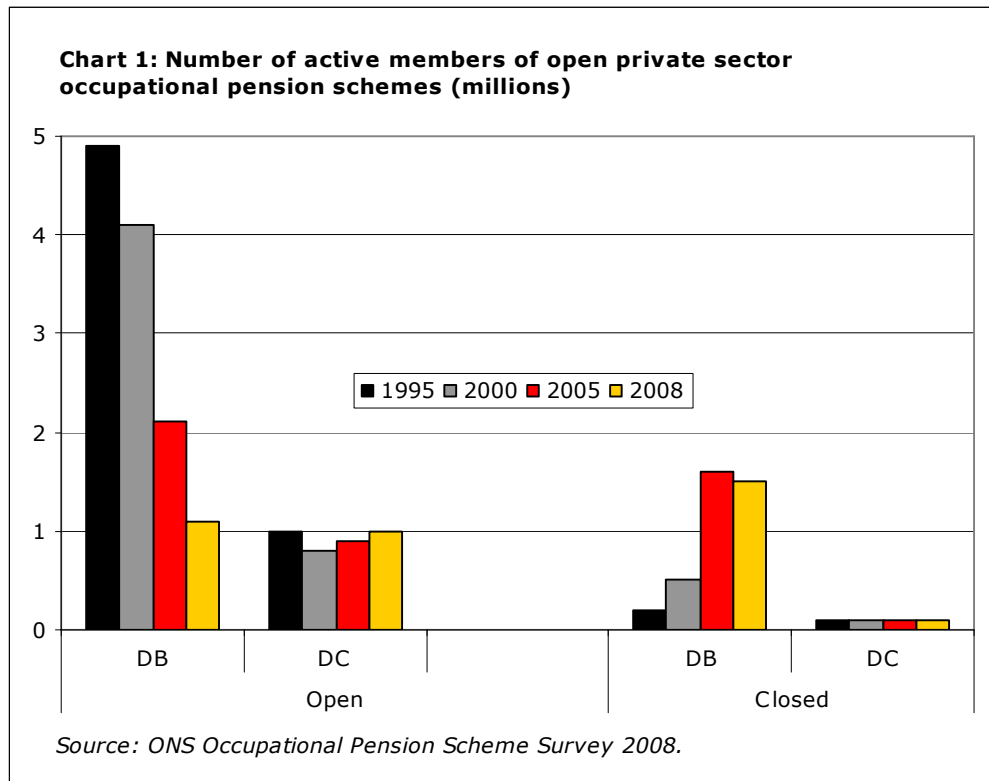
²⁷ www.admin.ch/ch/d/cf/ko/index_60.html

²⁸ *Ständerat für tiefere Deckung der öffentlichen Pensionskassen*, www.drs4news.ch/www/de/drs4/nachrichten/schweiz/175907.staenderat-fuer-tiefere-deckung-der-oeffentlichen-pensionskassen.html, 3 March 2010.

females from 2020 onwards. For those on low to modest incomes, the Basic State Pension provides the main source of income in retirement.

Occupational pensions have been established for a long time and they traditionally have provided the main source of income in retirement for those above average earnings. The value of private pension funds amounted to 80 per cent of GDP in 2007. Most of these schemes in the private and public sectors have historically been of a DB nature. The implementation of new international accounting standards earlier last decade combined with uprated assumptions regarding future longevity trends led many businesses to close their DB pension plans to new members or new accruals. Chart 1 shows the sharp drop in the number of active members in open private-sector occupational pension schemes between 1995 and 2008. While there were nearly 5 million active members in these schemes in the mid 1990s, that number had dropped to just above 1 million. The economic and financial crisis has accelerated this process again, with even those (generally larger) businesses, which had previously been determined to keep their schemes open, now closing them. This decline has not been offset by an equivalent increase in the membership of DC schemes. By contrast, in the public sector, most employees remain members of open DB pension schemes.

Private sector DB pension schemes are quickly disappearing in the UK...



The closure of private sector DB pension schemes to new accruals means that these schemes are increasingly becoming a legacy issue in the UK rather than providing incomes for future generations of pensioners, with funds held in these schemes predominantly belonging to older workers or those already in retirement.²⁹

United States

The American pension system is based on the three pillars of state provision, occupational pensions and private savings. Some 46 per cent of employees are members of an occupational pension scheme and around 35 per cent have personal plans, with DC pensions now much more common. Only a minority of workers continue to be members of DB occupational plans.

²⁹ A more detailed discussion of the British pensions landscape can be found in *Back to the drawing board: the economic crisis and its implications for pension provision in the United Kingdom*, Frank Eich and Bob Swarup, 2009.

The state pension system (Old-Age, Survivors, and Disability Insurance program, OASDI) is overwhelmingly financed through PAYG social security taxes paid by employers and employees. In the early 1980s it was decided to partially pre-fund future state pension spending and to this end social security tax was increased above what was required to pay ongoing spending. It was hoped that receipts would exceed spending until around 2020. As a result of the recession though, social security spending has increased substantially and it is now projected that the balance will turn negative mid decade.³⁰

...and as such follow
an earlier trend in
the US

In the private sector around 60 per cent of the workforce has access to retirement plans, of which around two thirds are nowadays DC with the remainder still DB. In the past DB schemes were markedly more important. The most widespread type of DC plan is the 401(k) plan. With respect to private sector DB pension schemes, it has been estimated that their funding ratio stood at 85 per cent in 2009; up from the 2008 ratio but markedly lower than in previous years.³¹ The Pension Protection Act 2006 *inter alia* established a 100 per cent funding target, new rules regarding the premium underfunded schemes must pay to the Pension Benefit Guaranty Corporation (PBGC).³² Dealing with the legacy of past DB promises is a major challenge for many businesses.

DB pension plans very remain popular in the public sector, whether it is for local or federal government officials or teachers etc. The California Public Employees' Retirement System (CalPERS), for example, is one of the largest public pension funds in the US with assets amounting to around \$200bn.³³ The PEW Center on the States has estimated that in fiscal year 2008 the aggregate funding position of the states' pension schemes stood at 84 per cent. In absolute terms the unfunded portion was around \$450bn.³⁴ The PEW Center also noted though that some states are doing much better than others; for example Florida, Idaho, New York, North Carolina and Wisconsin entered the recession with fully funded pensions.

iv. Concluding comments

This paper presented the role (funded) defined-benefit private sector occupational pension schemes play in national pensions in a sub-group of OECD countries. The paper showed that in the majority of countries under consideration statutory (state) pension schemes are the main if not only source of income in retirement for most people, with occupational pensions only playing a minor role, if that. In several countries private sector occupational pension schemes do play an important role in providing pensioner incomes. In these countries there has generally been a shift from DB to DC pensions, with the risks associated with pensions moved from businesses to individuals. Australia, for example, shifted from DB to DC pensions a generation ago, leaving only a few major businesses with any sizeable DB pension liabilities now. The UK is still in the midst of this change, with the economic and financial crisis accelerating the closure of existing DB pension schemes. Dealing with the legacy of DB pension liabilities is a major issue. The picture is similar in the Netherlands and Ireland, with the transition in the US at a more advanced stage. The paper also showed the diverging DB arrangements in the private and public sectors. In many countries, public sector pensions are of defined benefit in nature but unfunded: future payments will be financed from future revenue. This option is not available to private sector businesses. In the aftermath of the economic and financial crisis, governments around the world are struggling with their public finances. Dealing with the future cost of DB pensions is therefore also becoming increasingly an issue in the public sector.

³⁰ CBO's Long-Term Projections for Social Security: 2009 Update, Congressional Budget Office, August 2009.

³¹ Accounting Policy Update: Big contributions to pension plans, but still underfunded, Goldman Sachs, September 2009.

³² Special Report to Clients The Pension Protection Act of 2006, Hewitt Associates, 2006.

³³ In March 2010 the exact value was \$203bn. See www.calpers.ca.gov/

³⁴ The trillion dollar gap Underfunded state retirement systems and the roads to reform, The PEW Center on the States, February 2010.

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About the author

Dr Frank Eich holds an MSc and PhD in Economics from the London School of Economics, and has worked as a professional economist both in the private and public sector. Before joining HM Treasury as an economic adviser in 2000, he worked for three years as a country economist for the Economist Intelligence Unit. In 2008 Frank worked on European and international economic policy issues in the German Finance Ministry in Berlin; he joined Pension Corporation as senior economist in October 2008.

Telephone + 44 (0)20 7105 2236
Email eich@pensioncorporation.com



**PENSION
CORPORATION**

Pension Corporation, 14 Cornhill, London EC3V 3ND. Telephone +44 (0)20 7105 2000 Fax +44 (0)20 7105 2001
Email info@pensioncorporation.com www.pensioncorporation.com