PENSION MARKETS IN FOCUS

October 2006, Issue 3

In this issue

Pension Markets in Focus is published by the Financial Affairs Division of the Directorate of Financial and Enterprise Affairs.

Please address all correspondence to: pensionmarkets.newsletter@oecd.org

If you wish to subscribe to Pension Markets in Focus please send an email with your full contact details.

Pension Markets in Focus can be downloaded at: http://www.oecd.org/daf/pensions

OECD SEEKING ADDITIONAL PARTNERS

In the framework of its work on global pension statistics, the OECD Financial Affairs Division is seeking additional partners from both the public and the private sector.

Should your organisation be interested or should you require more information, please contact, Jean-Marc Salou, Project Manager (Pension and Insurance Statistics and Indicators) in the Directorate for Financial and Enterprise Affairs, (tel.: +33 1 45 24 91 10, e-mail: jean-marc.salou@oecd.org).

In view of the significant demographic transformations in the OECD area in recent decades, all OECD Member countries have reformed their old-age retirement systems in one way or another, and in many cases have introduced or expanded the role of funded pensions. Against this background, pension fund markets in the OECD area have expanded rapidly in the past few years, reaching nearly USD 18 trillion in 2005, and there is evidence to suggest that this trend will continue in the coming decades.

Conditions for further success of funded pension plans include high performance but also an appropriate and well-balanced regulatory framework, which can improve public and policy confidence, including through the security of pension funds and protection of beneficiaries. This is especially important as households are more and more exposed to financial risks through funding gaps in their defined benefit plans or the increasing transfer to them of investment and longevity risks in their defined contribution plans.

Several countries are introducing major reforms to secure the safe development of private pensions. In this respect, the OECD has been very active since the last issue of this Newsletter. Early in 2006, the OECD Council endorsed new pension guidelines, which offer a roadmap for how pension funds should manage their assets. They call on governments to implement a prudential regulatory framework that promotes diversification and high level of fiduciary responsibility of trustees. In summer, the Organisation also invited public comment on draft guidelines on the funding and benefit security of pensions, which should be released by the end of 2006.

The increase in defined contribution plans in many countries raises important challenges, as responsibilities are shifted to individuals, who may not be well equipped to manage them. This requires an urgent improvement of financial literacy and awareness. The G-8 Finance Ministers, during their meeting in St Petersburg on 10th June 2006, recognised the importance of financial education and mandated the OECD to further develop financial literacy guidelines based on best practices.

Policy reforms and guidelines rely very much on a solid analytical background for which statistical data and indicators are essential. In this respect, we are seeking voluntary financial contributions that would help us to further expand and consolidate our statistical work and our sets of indicators. Interested entities from the public or private sector are invited to contact us at the address indicated in the box on the left side.

André Laboul
Head of the Financial Affairs Division,
Directorate of Financial and Enterprise Affairs, OECD

OVERVIEW OF THE FINANCIAL WEALTH ACCUMULATED UNDER FUNDED PENSION ARRANGEMENTS

In addition to private pension fund and life insurance assets, several countries have accumulated large amounts of pension assets in their national pension reserve funds. Pension reserve fund refers to assets set aside by otherwise pay-as-you-go systems in preparation for the rising fiscal costs resulting from the predicted ageing of the population in the next few decades.

The statistics in Chart 1 show that by 2005, the United States had accumulated a large amount of financial pension wealth – equivalent to more than 160% of GDP - of which, 45.3% was accounted for by the pension reserve fund, 93.8% by pension funds, and 22.8% by life insurance assets. Other countries with solid pension and life insurance markets include Ireland, Norway, Denmark and Japan, where the total amount of pension wealth was over 100% of GDP. By comparison, the ratio of total pension wealth to GDP was less than 40% in three countries, namely Korea, Portugal, and New Zealand.

The OECD pension plan classification considers both funded pension plans that are workplace-based (occupational pension plans) or accessed directly in retail markets (personal plans). Both mandatory and voluntary arrangements are included. Because funded pension arrangements have developed heterogeneously across OECD countries, it is also important to be aware of the institutional differences between countries. Depending on the country in which they operate, pension funds may or may not have legal personality. Those with legal personality can take many forms. The two main ones are the trust/foundation and the corporate form. In other countries, pension funds are independent entities that lack legal personality and consists strictly of a legally separated pool of assets that can be managed by a financial company on behalf of the members. Often, only certain financial institutions are authorised to manage such pension funds (banks and insurance companies in Japan, life insurance companies or pension fund management companies in Portugal and Spain, pension fund management companies in the Czech Republic and Poland, and pension and portfolio management companies in Turkey).

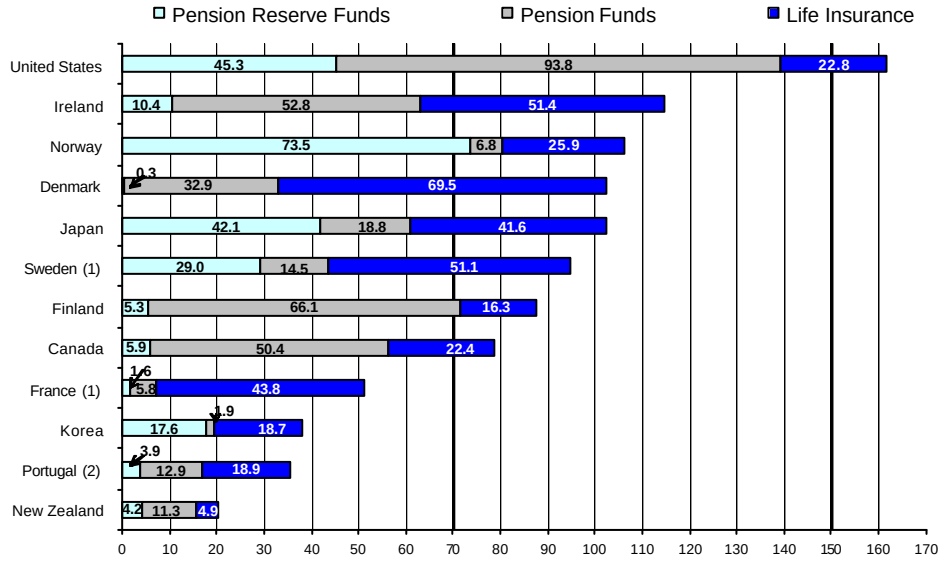
Application of the OECD pension plan classification to member countries

	Funded pension plans				Unfunded/ Pay-as-you-go plan - pension reserve fund
	Occupational		Personal		
	Mandatory & quasi-mandatory	Voluntary	Mandatory	Voluntary	
Australia	✓	✓	✓	✓	
Austria		✓		✓	
Belgium		✓		✓	
Canada		✓		✓	✓
Czech Republic				✓	
Denmark	✓			✓	✓
Finland	✓	✓		✓	✓
France	✓	✓		✓	✓
Germany		✓		✓	
Greece		✓		✓	
Hungary	✓	✓	✓	✓	
Iceland	✓			✓	
Ireland				✓	✓
Italy				✓	
Japan				✓	✓
Korea				✓	✓
Luxembourg				✓	
Mexico			✓	✓	
Netherlands				✓	
New Zealand				✓	✓
Norway				✓	✓
Poland			✓	✓	
Portugal				✓	✓
Slovak Republic			✓	✓	
Spain				✓	✓
Sweden	✓			✓	✓
Switzerland	✓			✓	
Turkey		✓		✓	
United Kingdom		✓		✓	
United States		✓		✓	✓

Source: OECD.

Chart 1. Consolidated pension and life insurance assets in selected OECD countries, 2005

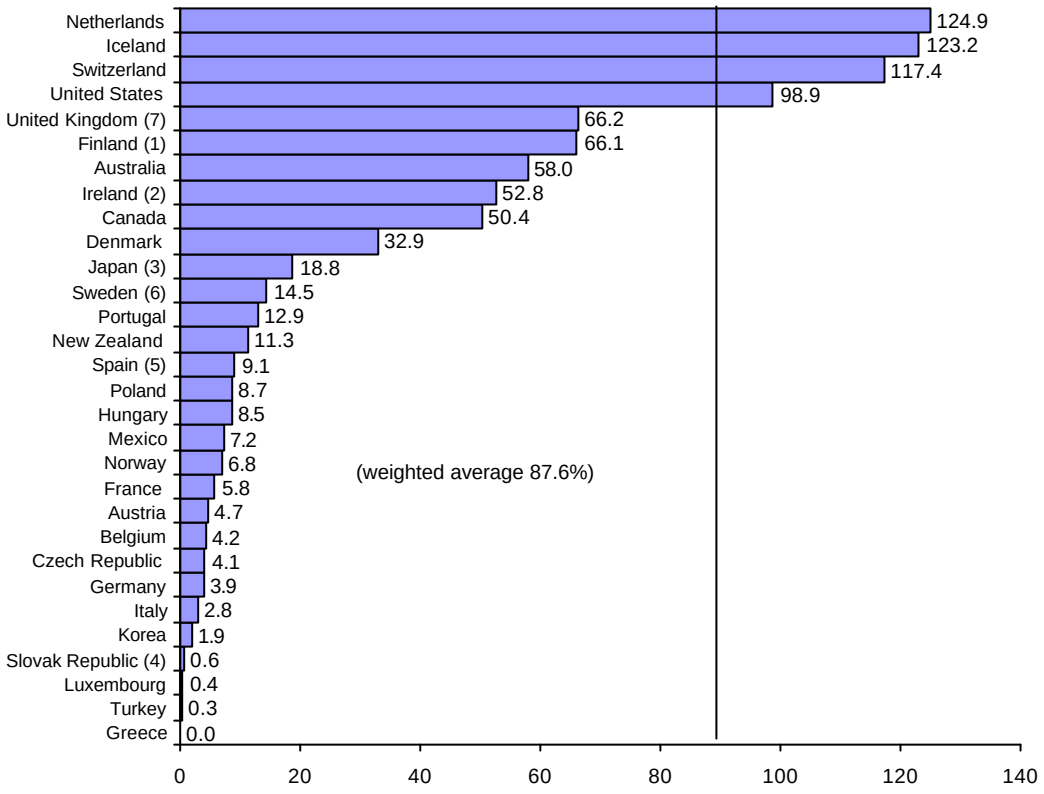
In per cent of GDP



Source: OECD, Global Pension Statistics, Insurance Statistics and other administrative sources.

Chart 2. Importance of pension funds in OECD countries, 2005

In per cent of GDP



Source: OECD, Global Pension Statistics.

In the past few years pension funds have steadily recovered from the equity market downturn of the early 2000s and shown robust asset growth. Total pension fund assets in the OECD area amounted to USD 17.9 trillion in 2005, up from USD 13.0 trillion in 2001. The annual aggregate growth rate of pension fund assets in US dollar terms was 8.7% between 2001 and 2005.

World equity markets experienced a major slump between 2000 and 2003. Given the large equity holding in pension portfolios in many countries, directly and indirectly (see Table 3), the recession in the equity market put downward pressure on pension asset growth. The figures in Table 5 show that during the market downturn period, i.e. 2001-2002, pension fund assets in the OECD area declined from USD 13.0 trillion in 2001 to 12.1 trillion in 2002, equivalent to a decrease of 7.0%. Since 2003, however, pension markets have gradually recovered and expanded accordingly, with assets of USD 14.6 trillion in 2003, USD 16.5 trillion in 2004, and USD 17.9 trillion in 2005. Looking across the whole recovery period, i.e. 2002-2005, the annual asset growth rate was 14.2%.

Of all the OECD countries, the United States witnessed the most significant decline in pension fund assets during the downturn period, with assets dropping from USD 9.7 trillion to USD 8.8 trillion – a 9.6% decrease - between 2001-2002, in contrast to the trend of significant expansion in some other countries. For instance, pension assets in France rose from USD 51.4 billion to USD 95.4 billion (an 85.6% increase), those in Poland from USD 4.6 billion to USD 7.6 billion (a 64.2% increase), while there were more modest rises in other countries, e.g. Australia from USD 212.9 billion to USD 239.3 billion (a 12.4% increase), and Italy, from USD 25.2 billion to USD 28.3 billion (a 12.4% increase).

Total pension fund assets in the OECD area rose slightly from 86.7% of GDP in 2001 to 87.6% in 2005.

In contrast to the large expansion of pension fund assets in US dollar terms as presented earlier, the small increase in the ratio of pension fund assets to GDP was mainly due to the corresponding rise in the value of GDP in the OECD countries. In the meantime during the period of the equity market downturn, i.e. 2001-2002, the ratio of assets to GDP dropped by 8.8 percentage points, while during the market recovery period, i.e. 2002-2005, the ratio exhibited an increase to reach the previous level.

Table 1 presents comparative statistics across countries. During 2001-2002, the Dutch pension market contracted most significantly, by 17.1 percentage points (from 102.6% of GDP to 85.5% of GDP), while the French market expanded by 2.7 percentage points (3.9% of GDP to 6.6% of GDP). In between these extremes, Canadian, Irish and Swiss pension assets dropped by 5.5, 9.2 and 7.7 percentage points respectively, while assets increased in Iceland and

Mexico, by 1.0 and 0.9 percentage points respectively. By way of comparison, the growth rate of pension assets to GDP between 2002 and 2005 was larger than between 2001-2002. Of 27 countries for which data are available, only two had negative growth rates of assets to GDP between 2002 and 2005 – Belgium, and New Zealand.

A major reason explaining the magnitude of the decline and rise in pension fund assets across countries is the exposure to equity and equity-related products in the pension portfolios. In general, the more the exposure to equity and equity-related products, the greater the changes in pension assets were between 2002 and 2005.

In the same period, the Netherlands and Iceland had the largest pension fund markets relative to their economies. As shown in Chart 2, in 2005, their pension fund assets to GDP ratio was 124.9% and 123.2% respectively, partly due to the relatively small size of their economies alongside their developed financial and pension fund markets. At the other end of the spectrum in Luxembourg, Turkey and Greece, pension fund markets were at the initial stage of development, with ratios of 0.3%, 0.3% and 0%, respectively.

Table 1. Evolution of the size of pension funds relative to GDP, 2001-2005

	Total investments of pension funds In per cent of GDP				
OECD Countries	**2001**	**2002**	**2003**	**2004**	**2005**
Australia	57.7	58.1	54.4	51.4	58.0
Austria	3.9	3.9	4.2	4.5	4.7
Belgium	5.5	4.9	3.9	4.1	4.2
Canada	53.3	47.8	52.1	48.9	50.4
Czech Republic	2.3	2.8	3.1	3.6	4.1
Denmark	27.2	25.5	27.4	29.8	33.6
Finland (1)	8.2	8.0	8.3	45.3	66.1
France	3.9	6.6	7.0	6.0	5.8
Germany	3.4	3.5	3.6	3.8	3.9
Greece	_	_	_	_	_
Hungary	4.0	4.5	5.3	6.9	8.5
Iceland	84.7	85.7	99.9	108.0	123.2
Ireland (2)	44.3	35.1	39.4	42.0	52.8
Italy	2.3	2.3	2.4	2.6	2.8
Japan (3)	13.9	14.1	15.3	15.2	18.8
Korea	..	1.5	1.6	1.7	1.9
Luxembourg	..	..	..	0.3	0.4
Mexico	4.3	5.2	5.8	6.3	7.2
Netherlands	102.6	85.5	101.3	108.7	124.9
New Zealand	14.7	13.0	11.3	11.3	11.3
Norway	4.0	4.0	4.6	6.6	6.8
Poland	2.5	4.0	5.5	7.0	8.7
Portugal	11.5	11.5	11.8	10.6	12.9
Slovak Republic (4)	0.0	0.0	0.0	0.0	0.6
Spain (5)	5.8	5.7	6.2	9.0	9.1
Sweden (6)	8.2	7.6	7.7	12.4	14.5
Switzerland	104.4	96.7	103.6	108.5	117.4
Turkey	..	..	..	0.1	0.3
United Kingdom (7)	72.5	68.9	65.1	68.8	70.1
United States	96.2	84.1	96.2	99.6	98.9
Total OECD	**86.7**	**75.5**	**84.8**	**87.3**	**87.6**

Source: OECD, Global Pension Statistics.

The variation in pension fund assets within OECD countries, in both US dollar terms and relative to GDP, reflects the differences in the design and maturity of the pension systems.

Many factors need to be taken into account when designing a pension system. These include, among others, socio-economic trends, demographic structure, fiscal position, and the power of the trade unions. The differences in these factors across countries explain the variations in their pension systems, which, in turn, directly relate to the size of the pension assets accumulated in each individual country. In some countries, like the United Kingdom and the United States, private (occupational) pension plans started decades ago, and, not surprisingly, these two countries have the largest pension markets in absolute value. Large sums of pension assets have also been accumulated in two other Anglo-Saxon countries - Australia and Canada - and in some other countries, for instance, Japan, the Netherlands, and Switzerland.

Many countries have followed a different model, where public pensions play a dominant role in the old-age retirement system. Examples include some continental European countries like France, Greece, Italy and Spain. Table 1 and Table 5 provide statistics showing the small size of pension assets accumulation in those countries. For instance, in 2005, the French private pension market's accumulated assets amounted to USD 123.3 billion or 5.8% of GDP.

In addition to the two groups of countries referred to above, many other countries have started to introduce and promote private pension plans over the past decade, notably some Central and Eastern European countries. Given the small asset base in those countries, pension fund assets grew quite significantly, as shown in Table 1 and Table 5. For example, in the Czech Republic, pension assets in dollar terms over the five-year period 2001-05 grew from USD 1.4 billion to USD 5.0 billion, in Hungary from USD 2.1 billion to USD 9.3 billion, and in Poland from USD 4.6 billion to USD 26.3 billion. For these countries, the corresponding five-year growth rate was 37.5%, 45.7% and 54.5%, respectively. Assets in these emerging pension markets are expected to increase rapidly in the future.

Two other factors affecting the growth of private pension assets relate to whether participation is mandatory, and whether tax incentives are supportive. As reported in the December 2005 issue of this Newsletter, fourteen out of 30 OECD countries had mandatory or quasi-mandatory pension systems. Australia implemented pension reforms in 1992, characterised by a 9% rate of mandatory employer contribution. Concerning the taxation of private pension funds, the most popular arrangement for the tax treatment of private pensions is exempt-exempt-tax (EET), that is, pension contributions and investment incomes are exempt from taxation while pension payments are taxed. In 2003, the EET arrangement was used in 22 out of 30 OECD countries, for example, Canada, Finland and Iceland. Among countries not applying the EET regimes were Australia, Hungary, and New Zealand (see Antolin, P., et al. (2004): Long-term Budgetary Implications of Tax-favoured Retirement Plans, OECD).

Largely as a result of the continued rallying of the equity market in recent years, pension funds in many OECD countries enjoyed high returns in 2005.

In Australia, the nominal return was 10-14%, depending on the type of plan, in Belgium it was, on average, 14.9%, 14.0% in Denmark, 13.0% in the Netherlands and 12.7% in Norway.

High returns led to rapid expansion in pension fund assets. Two of the countries with considerable asset growth were Turkey and the Slovak Republic. The Turkish pension market expanded from USD 209 million in 2004 to USD 919 million in 2005. In the Slovak Republic, pension assets increased from USD 7 million in 2004 to USD 291 million in 2005. The large increase in Turkish and Slovak pension assets in 2005 was largely attributable to the small asset base and the structural pension reforms.

The German private pension market is expected to grow in the next few years due to the post-2000 pension reforms. Meanwhile, it is reported that the premium income for 'Pensionskassen', which is one of the two main types of pension fund in this country, rose by almost 25% in 2005.

The increasing control that individual members have over their retirement assets is observable across OECD countries, bringing greater flexibility and also signalling the growing importance of financial education.

Various countries have strengthened individual choice in their mandatory, defined contribution plans, allowing individual members control over investments. For example, starting from 2005, a new law in Mexico allows members to switch from one fund manager to another fund manager without waiting for the previously stipulated one-year period as long as they are moving to a lower-fee fund manager. This new law introduces greater competition to the industry but also gives more flexibility and control to members. In addition, there was an increase (7.5%) in the number of small self-managed superannuation funds (less than four members) in Australia in 2005. This increase was largely attributable to the willingness of members to take control of their retirement assets, since all the members in such small self-managed funds are normally involved in the operation of the fund.

Giving more flexibility and control to individual members can be beneficial, as it recognises the differences between people in preferences (for example, risk aversion). Members can choose between different investment portfolios in some mandatory defined contribution system such as Sweden's and Mexico's (see Box 2 for details). However, at the same time the lack of financial knowledge of individual members is a major policy concern.

In view of the potential fiscal costs, many OECD countries have taken action to increase the long-term sustainability of existing pension systems through parametric reforms in 2005.

For example, in 2005, Turkey introduced regulations raising the retirement age and making it harder for participants to access benefits before this point. In Finland, the formula used to calculate DB benefits was changed in 2005, so that benefits became based on earnings throughout the whole working life rather than a specific shorter period of relatively high earnings. In addition, benefits were linked to average life expectancy, which has a direct impact in curbing the increase in pension expenditure. In the Netherlands, many occupational pension plans now have benefits based on average earnings rather final salary.

In Italy, a new law aimed to boost the growth of private pensions was approved at the end of 2005. Under the new provisions (The so-called TFR, or 'trattamento di fine rapporto, expected to become effective by 2008), an amount equivalent to 7% of salaries will be automatically paid into occupational pension funds, unless the interested worker explicitly opposes this. The annual flow of TFR is about EUR 15 billion. The new law also provides fiscal incentives to stimulate the growth of pension funds, to increase transparency and comparability of all pension plans, and to strengthen the role of COVIP, Italy's private pension supervisor.

In Hungary, a new law passed in December 2005 would potentially promote pension asset growth. The new regulation features an additional pillar, which is a fully funded personal savings account. This change is promising in that it offers flexibility as individuals can make investment decisions. It also offers low operating costs.

With regards to operating costs, Mexican pension funds recorded an 11.7% cost reduction in 2005, mainly due to increased competition among pension fund managers (Afores) following the new Retirement and Saving Systems Law of the beginning of 2005. A number of other OECD countries also witnessed a fall in operation costs. For example, total expenditure dropped by 3.1% for Canadian pension trust funds and 5.0% for Danish life insurance companies and pension funds in 2004-2005.

In the OECD area, the retirement landscape is changing as the number of occupational DB plans is decreasing whilst there has been a corresponding increase in DC plans.

Statistics in the left panel of Table 2 show that, as of 2004, eight out of 21 OECD countries accumulated an amount of DC plan assets equivalent to over half of total occupational pension assets. This is particularly the case in Denmark, Ireland and Spain where virtually all occupational pension assets were accounted for by DC plans. In Australia, Austria, Iceland and Italy, DC plans also played a significant role. Despite DC plans' increasing popularity in the above OECD countries, DB plans accounted for all occupational assets in four countries, i.e. Finland, Germany, Korea and Norway. In Canada, Japan, the Netherlands, Portugal and Sweden, DB assets comprised over 90% of the total occupational pension assets.

Table 2. DB vs. DC in occupational plans in selected OECD countries, 2004

In per cent of total assets

OECD Countries	DC vs. DB plans in occupational		DC vs. DB plans in total occupational and personal plans	
	DC plans	DB plans	DC plans	DB plans
Australia	83	17	91	9
Austria	75	25	..	..
Belgium	25	75	..	..
Canada	7	93	37	63
Denmark	97	3	97	3
Finland	0	100	20	80
Germany	0	100	..	..
Greece	50	50	..	..
Iceland	82	18	84	16
Ireland	98	2	..	..
Italy	75	25	79	21
Japan	1	99	4	96
Korea	0	100	61	39
Netherlands	9	91	..	..
New Zealand	52	48	71	29
Norway	0	100	..	..
Portugal	2	98	4	96
Spain	97	3	99	1
Sweden	5	95	41	59
United Kingdom	22	78	..	..
United States	35	65	55	45

Source: OECD, Global Pension Statistics, various sources and OECD staff estimates.

When personal pension plans are incorporated into the analysis, assets accumulated in DB plans become less significant relative to the total assets. The split data of DC and DB assets in the aggregated occupational and personal plans are given in the right panel of Table 2. For example, in 2004 the Canadian DB plans accounted for 93% of occupational pension assets, while they accounted only for 63% of total occupational and personal pension assets. Correspondingly the share of the Canadian DC plan assets increased from 7% to 37%. This observation was applicable to all other countries, except Denmark and those countries without data. In particular, as of 2004 in Finland and Korea, all occupational assets were held in DB plans. In term of total occupational and personal pension assets, however, the share of DB plan assets dropped to 80%, and 39%, respectively.

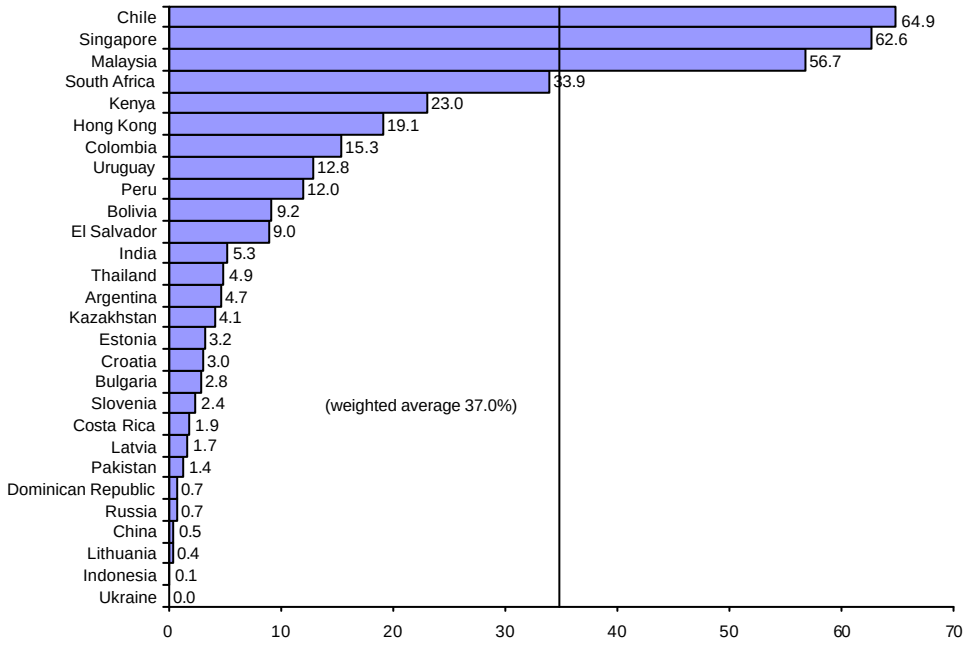
FOCUS ON PENSION MARKETS FOR SELECTED NON-OECD MEMBERS

When compared with OECD countries, pension markets in most of the selected non-OECD members were at an early stage of development, with the weighted average ratio of pension fund assets to GDP across 27 economies being 34.0% as of 2005, compared to 87.6% for the OECD area.

Statistics in Chart 3 indicate that as of 2005 the largest non-OECD pension fund market as a percent of GDP was in Chile, where the ratio of pension assets to GDP was 64.9%. This ratio was 62.6% for Singapore and 33.9% for South Africa. For all other economies, pension fund markets were at an early stage of development since total pension assets accounted for less than 30% of the respective GDP, e.g. Colombia (15.3%), India (5.3%), Kenya (23.0%), Russia (0.7%) and Slovenia (2.4%). One of the oldest pension funds outside the OECD is Singapore's, where the funded provident pension system was adopted in 1950s. Following successful implementation of pension reform in Chile in 1981, many other countries have followed the lead, e.g. Argentina in 1994, the Dominican Republic in 2003, Bulgaria in 2000, Croatia 2002, China in 1997, and Peru in 1993. Based on statistics in Chart 3, pension fund markets in most of the selected non-OECD economies have been characterised by small asset accumulation so far; however, given the funded nature of the new pension systems introduced in those above-mentioned economies, it is expected that pension assets will expand in the following years.

Chart 3. Pension fund assets in selected non-OECD members, 2005

In per cent of GDP



Note: total may not add up due to rounding or to negligible value.
Source: OECD, Global Pension Statistics.

PENSION FUND ASSET ALLOCATION

Pension funds in the OECD are, in general, heavily invested in bonds, but there are major differences across countries, with some having over one third of their assets invested in equities.

Table 3 shows the dominant role bonds play in pension fund portfolios in many OECD countries. For example, in 2005, 54.5% of Austrian pension funds were invested in bonds, of which 74.7% in public bonds and 25.3% in private bonds. Other countries where bonds exceeded 50% of their pension fund portfolios in 2005 include the Czech Republic (82.4%), Denmark (50.3%), France (63.4), Hungary (75.5%), Korea (78.9%), Mexico (94.8%), Norway (55.4%), Poland (63.4%), Spain (60.2%), and Turkey (80.5%). At the same time, in all countries where figures are available, public sector bonds comprise a significant portion of the combined bond holdings, with four exceptions: Germany, Korea, the Netherlands and Spain.

Within the OECD area, four countries, namely Finland, the Netherlands, the United Kingdom and the United States witnessed a large allocation of pension fund assets to shares. For example, in Finland, 41.3% of pension fund assets were invested in shares, while in the Netherlands, the United Kingdom and the United States, shares accounted for 49.8%, 40.1% and 41.3% of pension fund portfolios, respectively. In comparison to last year's data (see the December 2005 issue of this Newsletter for details about 2004 data), more assets were allocated to shares in 2005; in 2004, shares comprised 30.4% of total pension assets in Finland, 44.6% in the Netherlands and 35.5% in the United States.

Partly due to large allocation to shares, bonds did not make up a significant portion of pension portfolios in these countries except Finland. For example, in 2005 bond holdings relative to total portfolio assets was 38.3% in the Netherlands, 20.2% in the United Kingdom and 14.7% in the United States, while this ratio was relatively high in Finland, i.e. 45.7%. Against the background of a rise in the allocation to shares in these countries over 2004-2005, changes in allocation to bonds were uneven in that Finnish and Dutch pension funds reduced their bond holdings from 50.1% and 39.3% in 2004, while the US pension funds increased the holding from 11.4% in 2004.

Pension funds allocated a very small share of assets to cash and deposits in most OECD countries, mainly due to low returns. The two OECD countries with the most significant proportion of cash and deposits in their pension fund portfolios were Korea (8.0%) and Portugal (10.0%).

By contrast, pension asset allocation in non-OECD developing countries was not as diverse as in OECD countries, and, in most cases, a significant portion of pension funds were allocated to bonds and other safer assets like cash and deposits.

As shown at the bottom of Table 3, some non-OECD countries show significant investment in cash and deposits. Brazilian pension funds, for instance, allocated 44.2% of assets to cash and deposits, while this figure was 70.9% and 40.1% for Indonesian and Thai pension funds, respectively. In addition, bonds were a major asset class in pension portfolios in those countries. In Bulgaria, 69.1% of assets were allocated to bonds, 65.9% in Colombia, 76.7% in Slovenia and 96.4% in Singapore in 2005. The main reasons for the large proportion of pension fund investment in cash and bonds were the restrictive investment regulations, the unavailability or scarcity of appropriate investment instruments in those countriesn and high interest rates.

Table 3. Structure of assets of pension funds in selected OECD countries, 2005

OECD Countries	Cash and Deposits	Bills and bonds issued by public and private sector	Of which: Bills and bonds issued by public administration	Of which: Bonds issued by the private sector	Loans	Shares	Land and Buildings	Mutual funds (CIS)	Unallocated insurance contracts	Private Investment Funds	Other investments
Australia	2.3	_	..	..	7.0	21.7	1.2	65.9	_	_	1.9
Austria	3.6	54.5	74.7	25.3	0.8	36.5	1.3	..	..	..	3.2
Belgium	2.5	6.7	60.2	39.8	0.3	9.8	1.1	74.9	1.2	..	3.5
Canada	4.3	22.5	78.9	21.1	0.6	25.8	3.3	39.8	_	..	3.7
Czech Republic	_	82.4	73.2	26.8	_	_	0.6	_	..	..	17.0
Denmark (1)	0.7	50.3	52.9	46.9	_	25.9	1.7	11.2	_	..	10.2
Finland	_	45.7	100.0	_	5.2	41.3	7.7	..	..	..	0.1
France	1.6	63.4	..	..	1.2	5.3	3.1	25.8	..	..	0.3
Germany (2)	3.3	30.7	4.3	95.7	27.3	34.5	3.4	_	_	0.6	0.2
Hungary (3)	1.4	75.5	98.2	1.8	_	7.8	0.2	9.0	_	_	6.1
Iceland	1.7	49.9	53.9	46.1	8.7	34.5	0.1	1.8	_	..	3.3
Italy (4)	4.7	36.5	79.2	20.8	_	9.9	7.8	11.3	23.9	_	5.9
Korea	8.0	78.9	35.5	64.5	10.9	0.7	_	0.1	_	_	1.3
Luxembourg	6.8	33.2	_	_	_	10.6	_	_	_	45.8	3.6
Mexico	_	94.8	88.4	11.6	_	1.3	_	_	_	_	2.2
Netherlands	2.5	38.3	8.5	91.5	3.4	49.8	3.7				2.3
Norway	4.9	55.4	40.7	59.3	1.9	28.9	4.6	..	..	..	4.3
Poland	4.1	63.4	98.2	1.8	_	32.0	_	_	_	_	0.4
Portugal (5)	10.0	40.5	61.9	38.1	_	21.1	8.1	22.1	_	_	-1.9
Spain	7.3	60.2	30.3	69.7	1.0	15.2	3.2	9.0	_	_	2.4
Switzerland (6)	7.9	25.6	..	..	6.3	16.9	9.6	30.2	_	3.0	0.6
Turkey (7)	_	80.5	100.0	_	_	11.6	_	_	_	_	7.6
United Kingdom (8)	2.2	20.2	63.8	36.2	0.5	40.1	3.8	18.0	8.5	..	6.6
United States (9)	4.8	14.7	59.7	40.3	0.7	41.3	0.7	23.5	5.2	..	9.1
Selected non-OECD countries											
Brazil (10)	44.2	17.1	..	..	3.9	15.9	6.7	11.6	_	..	0.6
Bulgaria	19.2	69.1	72.5	27.5	_	6.4	0.7	0.8	_	_	2.7
Colombia	1.1	65.9	71.8	28.2	_	11.3	_	3.8	_	_	18.0
Estonia	5.2	45.4	54.6	45.4	_	38.7	0.5	8.9	_	_	1.3
Slovenia	15.3	76.7	53.4	46.6	..	4.5	_	3.4	..	..	0.1
Indonesia (10)	70.9	10.2	..	..	0.7	4.1	6.0	1.3	_	..	6.9
Singapore (10)	2.7	96.4	..	..	_	_	0.2	_	_	..	0.7
Thailand (8)	40.1	42.0	56.8	43.2	..	15.0	..	1.8	..	..	1.1

Source: OECD, Global Pension Statistics.

Box 1. Two simple measures of potential "scarcity" of pension fund investments

The Pension Market in Focus issue of December 2005 included a discussion of the potential scarcity of suitable pension fund investments, and it drew attention to an empirical measure of the difference between the supply of high-quality, fixed-income instruments (issued by G-10 governments) and estimates of potential demand from pension funds for such instruments. This measure suggests that, under specific circumstances, the demand for long-term government bonds from pension funds in the G-10 area may exceed the supply by a large margin. This box describes an update of this measure and discusses the robustness of the main results with respect to changes in the underlying assumptions.

To capture variations in pension funds' demand for bonds across different maturity segments, two alternative "scarcity" measure are considered here, both of which compare the time patterns of (estimated) future pension fund payment promises with the cash flows that pension funds could obtain from investing in government bonds. Such a comparison is similar in its approach to the strategy of cash-flow matching, whereby pension fund managers attempt to immunise their balance sheets by matching projected payouts with payments generated by investments in government bonds. Cash flows that can be generated through investments in government bonds are calculated based on detailed bond-specific information on the timing and amounts of coupon and principal payments. The cash flows implied by the current stock of outstanding G-10 government bonds are then compared to projections of aggregate payment promises from pension funds to their current plan members, under the assumption that current liabilities are equivalent to pension fund assets (data for which are available from the OECD Global Pension Statistics Project). The estimated term structure of payment promises out of pension liabilities is obtained as follows. Demographic variables such as the current population age structure and mortality dynamics (based on projected age- and time-specific conditional survival probabilities) are used to approximate the demographics of pension plan beneficiaries, assuming that each beneficiary, upon reaching retirement age, receives an equal real payment in each year of his remaining life time (i.e. similar to an inflation-indexed life annuity). It is assumed that no new liabilities are incurred and that all current liabilities are owed to "passive" plan members ("passive" essentially means not contributing to the pension plan). The results are given in Figure 1, which shows that, under a set of simplifying assumptions, potential "scarcity" would be greatest in absolute values in the maturity segment beyond ten years.

To see how robust these results are with regard to changes in the underlying assumptions the assumption that no new liabilities are incurred is dropped. Instead, it is assumed that (estimated) liabilities are owed both to current "active" and "passive" members, and that "active" plan members will continue to accumulate pension claims. Again, data on general population demographics in the G-10 countries are used to proxy the "population" of pension plans, whereby it is assumed that people older than 25 years have acquired pension claims as a function of their age. The results are shown in Figure 2, and they broadly confirm the ones shown in Figure 1.

Note, however, that there are some differences in nuances between the measures, reflecting the difference in the projected pattern of pension payments. While payments are projected to strictly decline under the first measure (Chart 1), the second measure projects that they increase until they peak around the year 2035, before declining thereafter. The first measure implies that there may be a "scarcity" of G-10 government bonds in the segment from 10 to 20 years, although it declines towards the latter part of that segment. The second measure shows more pronounced scarcity, spanning the full long-term to ultra-long-term segment (Chart 2). The second measure is preferable, on the basis of its less restrictive assumption regarding payment promises. In any case, both measures suggest that the demand for long-term government bonds may exceed the supply by a large margin.

Chart 1. Cash flows from G-10 government bonds and projected pension payments
('passive' plan members)

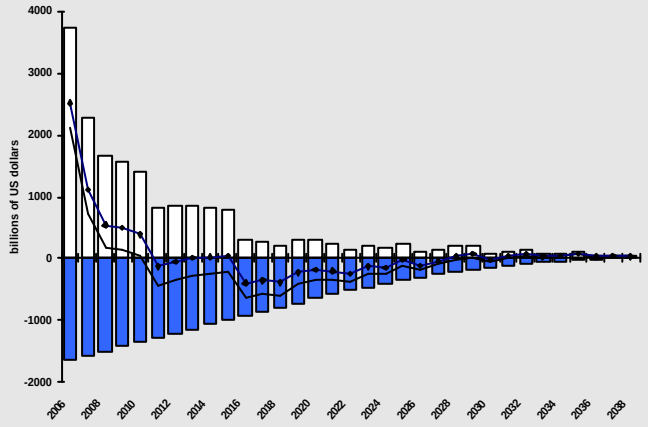
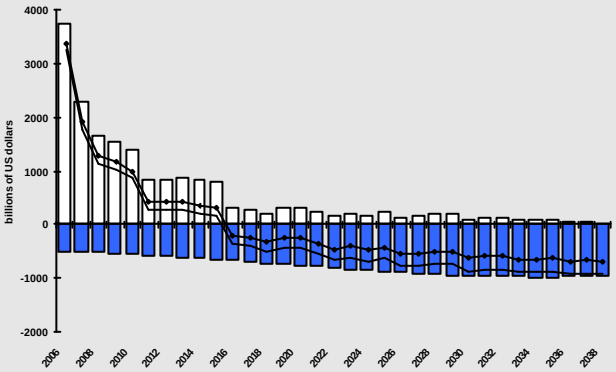


Chart 2. Cash flows from G-10 government bonds and projected pension payments
('active' and 'passive' plan members)



Payments from G-10 government bonds outstanding (as of 29.12.2005)

Projected payments out of G-10 pension fund liabilities (2004) when allocated to claims of today's 'passive' and 'active' plan members (assumption: schemes are closed to further accruals)

Difference in absolute values (100% of total pension fund assets allocated to bonds)

Difference in absolute values (75% of total pension fund assets allocated to bonds)

Notes: Cash flows from outstanding G-10 government bonds on the positive axis (as of December 2005). On the negative axis are estimates of payments by pension funds to beneficiaries, assuming that payments are due to 'passive' members only (see Chart 1) or to 'passive' as well as 'active' plan members (see Chart 2). Passive' plan members are defined as people 65 years of age or older in 2005. Active plan members are defined as 20 year-old people up to 64-year old people in 2005 aggregated over all G-10 countries. For more details see Schich and Weth (2006).

This box was prepared by Sebastian Schich and draws on: Schich, S. and M. Weth (2006), "Potential pension fund demand for high-quality long-term bonds: Quantifying 'scarcity' of suitable investments", OECD Financial Market Trends Vol. 2006/1, No. 90.

Shares made up a small proportion of total assets in non-OECD economies, with the ratio of shares to total assets being 15.9% in Brazil, 11.3% in Colombia, 4.5% in Slovenia, 0% in Singapore and 15.0% in Thailand. The only exception was Estonia, where 38.7% of pension assets were in shares.

Table 4 shows the asset allocation of pension funds in selected Latin American countries for 2005. Due to different asset classifications, the data are not directly comparable to those in Table 3. However, the general impression is of heavy investment in the state sector, i.e. government bonds. For example, in five out of eight countries - Argentina, Bolivia, Costa Rica, El Salvador and Uruguay- over half the total assets were in the state sector. Assets invested in the corporate sector were significant in Peruvian pension portfolios as they accounted for 50.3% of total assets, while in the Dominican Republic, almost all pension assets, i.e. 96.8%, were invested in the financial sector, i.e. securities issued by the banks. As far as foreign assets are concerned, most Latin American countries presented in Table 4 held a small portion of assets in the foreign sector. The main exception was Chile, with 30.4% of pension assets invested abroad in 2005, implying that the Chilean pension markets were relatively developed and the investment regulation regime was more lenient.

Table 4. Asset allocation of selected Latin American countries, 2005

In per cent of total investments

	State Sector	Corporate Sector	Financial Sector	Foreign Sector	Other Assets
Latin American countries					
Argentina	57.9	15.2	16.5	8.9	1.6
Bolivia	76.7	16.9	3.7	2.5	0.3
Chile	16.5	23.3	29.7	30.4	0.1
Costa Rica	70.9	5.1	24.0	0.0	0.0
El Salvador	80.9	0.3	12.8	6.0	0.0
Peru	20.4	50.3	19.1	10.2	0.0
Dominican Republic	0.0	3.2	96.8	0.0	0.0
Uruguay	83.4	4.3	8.8	0.0	3.5

Note: Total may not add up due to rounding or to negligible value.
Source: International Federation of Pension Funds Administrators

Different regulatory regimes across countries partly explain their different pension asset allocations.

In general, Anglo-Saxon countries adopt the prudent person rule (PPR) in pension fund investment. Under the PPR approach assets should be invested 'prudently' rather than limited according to category, and there are few investment restrictions on any specific assets. In practice this appears to lead to a higher share of assets in equities. For example, Australian pension funds allocated 21.7% of assets to equities in 2005, while this figure was 25.8% for Canada, 40.1% for the United Kingdom and 41.3% for the United States. Different quantitative asset restrictions (QAR) have traditionally been applied in many other countries and normally stipulate upper limits of investment in specific asset classes, e.g. equities and foreign assets (See OECD's Survey of Investment Regulations of Pension Funds for pension investment regulations as of December 2005, available at http://www.oecd.org/daf/pensions/).

In addition to the difference in regulatory regimes, another factor with an increasingly important impact on pension fund investment in major OECD countries, notably the United Kingdom, relates to the recent changes in pension accounting standards.

International Accounting Standard (IAS19), stipulates that the difference between the assets and liabilities of defined benefit (DB) plans should be reported on the balance sheet of the sponsoring company using market-based valuation methods. In the UK, the FRS17 requires immediate recognition of actuarial gains and losses. Previously, actuaries were allowed to smooth such changes across years. Under FRS17 volatile assets such as equities introduce more volatility onto corporate balance sheets creating a preference to bonds. This arguably can create a vicious circle as the greater the demand for bonds, the lower the yield, and the lower the yield, the greater the pension liabilities, given that liabilities are discounted using bond yields.

As asset-liability management has become more of a focus for the pension investment community there has been an increased exposure to bonds in countries with large accumulations of DB plan assets.

Compared to the 2004 data (see the December 2005 issue of this Newsletter for details about 2004 data), changes in asset allocation for 2004-2005 differ across countries. For example, some countries saw a decline in bond allocations - Finland by 4.4%, Mexico by 2.1% - while other countries had an increase in bond investment - Poland by 3.2% and Spain by 3.5%. A similar uneven change in other asset classes across countries can also be observed. In order to highlight the general trend across countries between 2004 and 2005, the aggregate changes across OECD countries by pension assets were calculated. These estimates indicate a rise in allocation to bonds (2.2%), loans (0.4%), equities (4.3%) and other investments (3.6%), while a decline in cash (-2.4%), mutual funds (-4.9%) and unallocated insurance contracts (-3.0%) over the period 2004-2005. Greater investment in bonds might reflect changes in the accounting rules and the increasing popularity of matching assets and liabilities, as discussed earlier, while increased allocation to equities could be largely attributable to the strong performance of the world stock markets over the last year.

Box 2. Investment choice in mandatory pension funds in selected OECD and non-OECD countries

A recent global trend in individual accounts plans is the introduction and expansion of investment choice to plan members. This global trend is founded on the traditional economic assumption that well informed agents act rationally to maximize their self-interest. Consequently, investment choice enables plan members to select the optimal investment portfolio that matches their particular risk-return preferences and ultimately, maximizes retirement incomes.

Under this new investment plan - known in some countries as multifunds system -, pension funds administrators are allowed to offer different investment portfolios targeting different age groups. This innovation was designed to allow workers to achieve a portfolio distribution which is more in line with their preferences and needs, as far as risk and yield are concerned. The funds are differentiated by the proportion of their portfolio invested in equities, where the greater the investment in equities, the greater the risk and the greater the expected return.

The introduction of investment choice means that members can exercise their own preferences, thereby producing increased well-being. Different members may have different preferences concerning the composition of the portfolio of their pension funds, and these are reflected in differing degrees of aversion to risk. Younger members may prefer a pension fund with a higher level of risk and expected return, in order to increase the expected value of their pension, whereas older members may prefer a fund with minimal risk, in order to minimize the fluctuations in the value of their pension.

Multiple funds have other positive results, both for the pension system and for the capital market in general. Firstly, they provide incentives to seek information regarding the pension fund's performance; secondly, they enhance the services provided by administrators; thirdly, they increase member participation; and fourthly, they improve the allocation of resources.

However, there are also arguments against expanding choice. On the one hand, wider choice comes at a much higher cost, because dividing individual pension contributions between different funds and providing information on different investment options can be costly. On the other hand, individual choice imposes two other kinds of costs to participants. Firstly, the opportunity cost of spending time making decisions that could be used in other activities; and, secondly, the cost associated with sub-optimal investment choices. Finally, evidence strongly suggests that too much choice is as detrimental as too little choice. Choices overload undermines effective decision making by consumers in complex areas such as pensions.

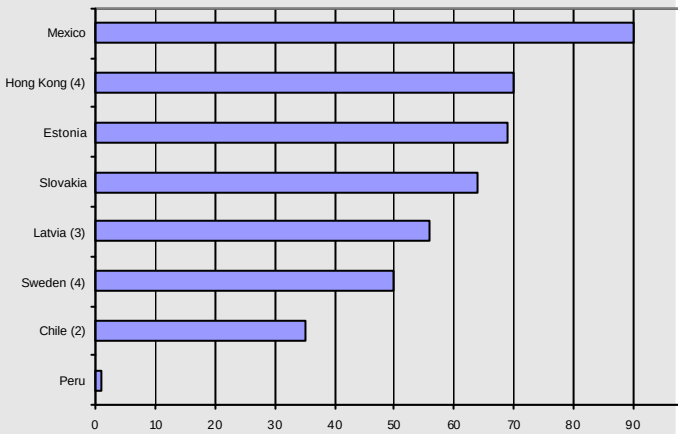
The following table 1 shows the number of investment options in selected OECD and non-OECD members that have allowed investment choice in their mandatory individual account system. Although, the different investment alternatives vary across countries, by the end 2005, most of the countries mentioned in the table below have allocated over 50% of the pension assets in those investment portfolios with the highest equity allocation which may exhibit a high risk tolerance of the member in these systems (see Chart 1).

Table 1. Number of pension investment options in selected OECD and non-OECD members, 2005

Country	Number of Investment options
Sweden (Premium Pension System)	By December 2005, over 700 funds were registered in the system. Around 50% of assets are invested in equity funds and 30% in the default option.
Hong Kong, (Mandatory Provident Fund)	Currently there are 307 different investment funds. 70% of the total assets were invested in balanced and equity funds with an equity exposure of 70% to 100%
Australia (Superannuation pension system)	The new choice of fund legislation means that from 1 July 2005, certain employees will be able to choose which super fund their compulsory employer contributions are paid into.
Chile	Each administrator can offer five different funds, which vary between 0% and 80% of equity exposure. Around 30% of members had made an active choice of some type of fund. Of them, the 66% of people selected those funds with the highest equity exposure.
Mexico	Each administrator can offer two different funds, which vary between 0% and 15% of equity exposure. Around 90% of total assets are invested in the riskiest fund.
Peru	Each administrator can offer three different funds, which vary between 10% and 80% of equity exposure. Only 1% of the participants had made an active choice of fund, and less than 0.1% had selected the riskiest portfolio.
Estonia, Latvia and Slovakia	Pension companies in each country may offer three different investment portfolios to their members. Over 50% of members in each country have invested their pension contributions in those funds with the highest equity exposure.

Chart 1. Percentage of total assets invested in those pension investment options with the highest equity allocation, 2005

In per cent of total investments



1: The portfolio with the highest equity allocation varies across countries.
2: The information includes the two portfolios with the highest equity allocation.
3: 2004.
4: For Sweden, the information includes only equity funds. For Hong Kong, the information includes equity and balanced funds.

This box was prepared by Waldo Tapia, consultant in the OECD Financial Affairs Division. This article describes briefly the investment choice in pension funds in selected OECD and non-OECD countries. A more detailed analysis and description of these system will appear in a forthcoming paper ("Individual Choice in Selected Countries", December 2006).

PENSION RESERVE FUNDS

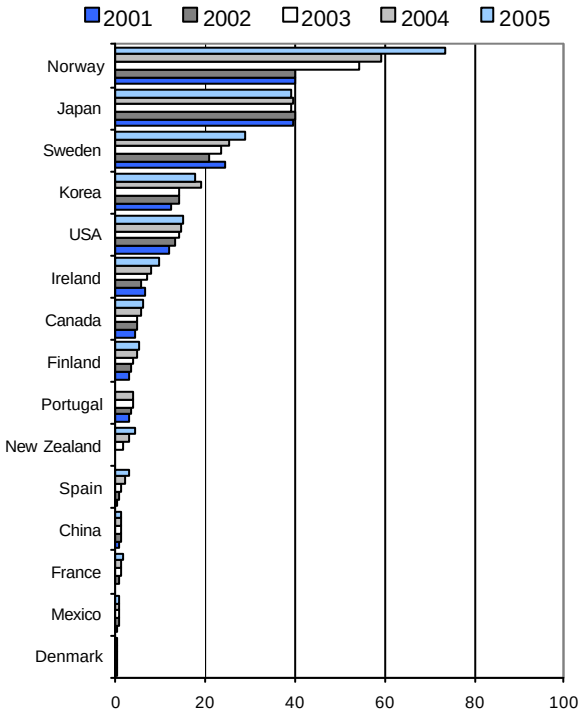
A pension reserve fund is an important component of the overall retirement income system in many countries. The main purpose in setting up a pension reserve fund is to smooth the expected rising fiscal burden on the public pay-as-you-go (PAYG) system, given an ageing population.

Over the past five years, pension reserve funds had stable, albeit low growth across countries. The only exception in 2005 was the Norwegian Government Pension Fund – formerly the Petroleum Fund.

Chart 4 shows that the pension reserve fund assets to GDP ratio in Norway increased from 40.2% in 2001 to 73.4% in 2005. The five countries with the largest pension reserve funds relative to GDP in 2005 were Norway (73.4%), Japan (39.3%), Sweden (29%), Korea (17.6%) and the United States (14.9%). In the remaining 10 countries, the pension reserve funds accounted for less than 10% of the GDP. Of these 15 countries, the United States created a Social Security Trust Fund in 1940; Portugal did the same in 1989, while both New Zealand and China set up a pension reserve fund more recently, in 2001. Most other countries set up a pension reserve fund in between these dates, particularly towards the end of 1990s, for example, Canada in 1997, France in 1999 and Korea in 1998.

Chart 4. Pension reserve funds for selected OECD and Non-OECD member countries, 2001-2005

In per cent of GDP

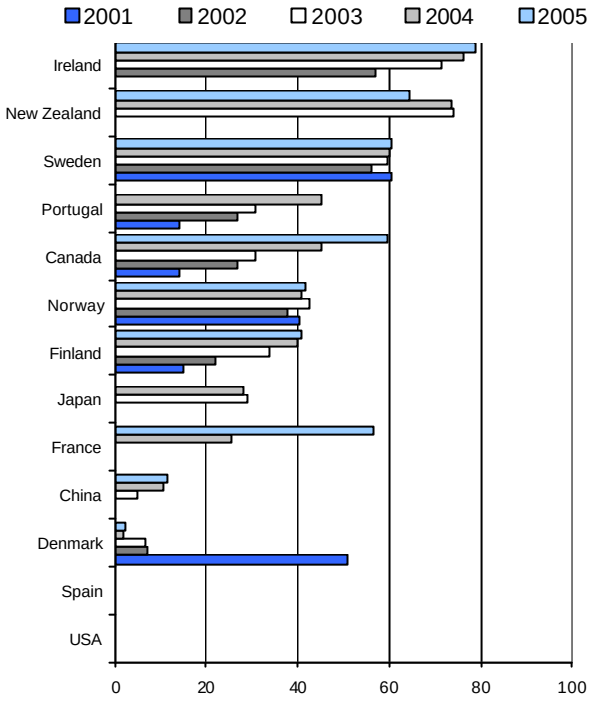


Source: OECD Global Pension Statistics, various sources.

In terms of asset allocation, Chart 5A shows that a significant share of the pension reserve funds were in equities, i.e. Ireland (78.7%) and Portugal (45.2%) in 2004, New Zealand (64.5%), Sweden (60.5%), Canada (59.8%) and Finland (41%) in 2005. The share allocated to equities increased most significantly in France, from 25.5% in 2004 to 56.5% in 2005. Chart 5B shows the proportion of pension reserve fund assets invested in bonds.

Chart 5A. Pension reserve funds, equity investment for selected OECD and Non-OECD member countries, 2001-2005

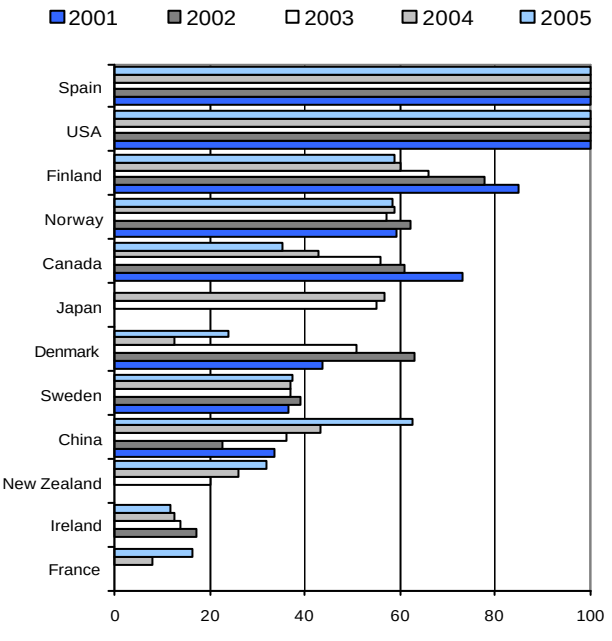
In per cent of total assets



Source: OECD Global Pension Statistics, various sources.

Chart 5B. Pension reserve funds, bond investment for selected OECD and Non-OECD member countries, 2001-2005

In per cent of total assets



Source: OECD Global Pension Statistics, various sources

It is interesting to note that all pension reserve fund assets were exclusively invested in bonds in the United States and Spain, and many other countries also had heavy bond allocations as shown in Chart 5B. For example, in 2005, the Finnish pension reserve fund had 59% of its assets in bonds, while this figure was 58.4% for Norway and 62.8% for China.

Over the five-year period 2001-2005, pension reserve funds in Canada, Finland, France, Ireland and Portugal invested more assets in equities, while asset allocation to equities remained relatively unchanged in other countries, except Denmark, where there was a statistical re- definition. Concerning bond investment, China and New Zealand invested more pension reserve fund assets in bonds over these years, while Finland, Canada and Ireland reduced their bond allocations.

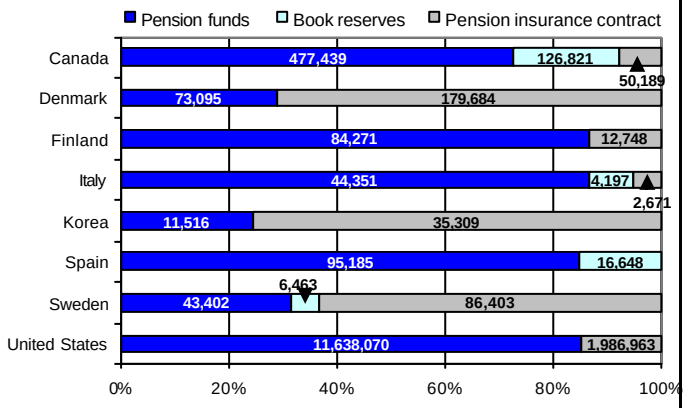
THE OECD CLASSIFICATION

The development of a common language has been the foundation for the OECD Working Party on Private Pensions' development of international standards for private pension regulation. This development has also been critical in the OECD's statistical data collection process that has been developed by the Working Party and its Task Force on Pension Statistics. This classification is structured around two key terms (pension plans and pension funds) and two approaches (functional and institutional). These approaches are consistent with IASB's international accounting standards.

Based on the OECD classification, there are three main types of funded private pension plans, pension funds (autonomous), book reserves (non-autonomous) and pension insurance contracts, as well as a residual category, i.e. others - any other types not included above. The dimension against which those plans are differentiated is the financing vehicle (see Box 3 for details).

Chart 6. Private pension plan assets by type of financing vehicles, 2004

In millions of USD and as a share of total



Source: OECD Global Pension Statistics

Chart 6 presents breakdown statistics of assets by these three types for eight OECD countries in 2004. Heterogeneity is observable across countries. For example pension funds in Canada, Finland, Italy, Spain and the United States accounted for most of total assets, while pension insurance contract accounted for most of total assets in Denmark, Korea and Sweden. In all countries, book reserves played a less significant role in terms of accumulating private pension assets. Specifically as of 2004 Canada accumulated USD 477.4 billion in pension funds, USD 126.8 billion in book reserves and USD 50.2 billion in pension insurance contract. In Sweden, these three figures were USD 43.4 billion, USD 6.5 billion and USD 86.4 billion, respectively.

Box 3. OECD classification of pension Plans by financing vehicles

FINANCING TYPES	
Pension funds (autonomous)	The pool of assets forming an independent legal entity that are bought with the contributions to a pension plan for the exclusive purpose of financing pension plan benefits. The plan/fund members have a legal or beneficial right or some other contractual claim against the assets of the pension fund. Pension funds take the form of either a special purpose entity with legal personality (such as a trust, foundation, or corporate entity) or a legally separated fund without legal personality managed by a dedicated provider (pension fund management company) or other financial institution on behalf of the plan/fund members.
Book reserves (non-autonomous)	Book reserves are sums entered in the balance sheet of the plan sponsor as reserves or provisions for pension benefits. Some assets may be held in separate accounts for the purpose of financing benefits, but are not legally or contractually pension plan assets.
Pension insurance contracts	An insurance contract that specifies pension plan contributions to an insurance undertaking in exchange for which the pension plan benefits will be paid when the members reach a specified retirement age or on earlier exit of members from the plan.
Other	Other type of financing vehicle not included in the above categories.
PENSION PLAN TYPES	
Occupational pension plans	Access to such plans is linked to an employment or professional relationship between the plan member and the entity that establishes the plan (the plan sponsor). Occupational plans may be established by employers or groups thereof (e.g. industry associations) and labour or professional associations, jointly or separately. The plan may be administered directly by the plan sponsor or by an independent entity (a pension fund or a financial institution acting as pension provider). In the latter case, the plan sponsor may still have oversight responsibilities over the operation of the plan.
Personal pension plans	Access to these plans does not have to be linked to an employment relationship. The plans are established and administered directly by a pension fund or a financial institution acting as pension provider without any intervention of employers. Individuals independently purchase and select material aspects of the arrangements. The employer may nonetheless make contributions to personal pension plans. Some personal plans may have restricted membership.
Defined benefit	Occupational plans other than defined contributions plans. DB plans generally can be classified into one of three main types, 'traditional', 'mixed' and 'hybrid' plans. • 'Traditional' DB plan: a DB plan where benefits are linked through a formula to the members' wages or salaries, length of employment, or other factors. • 'Hybrid' DB plan: a DB plan where benefits depend on a rate of return credited to contributions, where this rate of return is either specified in the plan rules, independently of the actual return on any supporting assets (e.g. fixed, indexed to a market benchmark, tied to salary or profit growth, etc), or is calculated with reference to the actual return of any supporting assets and a minimum return guarantee specified in the plan rules. • 'Mixed' DB plans: A DB plan that has two separate DB and DC components but which are treated as part of the same plan.
Defined contribution (protected)	A personal pension plan or occupational defined contribution pension plan other than an unprotected pension plan. The guarantees or promises may be offered by the pension plan/fund itself or the plan provider (e.g. deferred annuity, guaranteed rate of return).
Defined contribution (unprotected), total	A personal pension plan or occupational defined contribution pension plan where the pension plan/fund itself or the pension provider does not offer any investment return or benefit guarantees or promises covering the whole plan/fund.

Source: Private Pensions: OECD Classification and Glossary. The classification is available at http://www.oecd.org/daf/pensions/.

Table 5. Pension fund assets in OECD and selected non-OECD countries, 2001-2005

	Total investments of pension funds Millions of USD					Total investments of pension funds Millions of national currency				
OECD Countries	**2001**	**2002**	**2003**	**2004**	**2005**	**2001**	**2002**	**2003**	**2004**	**2005**
Australia	212,860	239,290	295,670	337,379	409,372	411,964	440,607	455,788	458,577	537,416
Austria	7,555	8,099	10,869	13,299	14,291	8,436	8,594	9,621	10,704	11,499
Belgium	12,639	12,428	12,152	14,508	15,430	14,113	13,187	10,756	11,677	12,415
Canada	375,565	346,341	445,761	477,439	569,216	581,527	543,770	624,225	621,192	689,723
Czech Republic	1,404	2,053	2,852	3,884	5,022	53,377	67,206	80,223	99,803	120,297
Denmark	43,639	44,324	58,782	73,095	87,032	363,115	349,460	386,609	437,660	521,852
Finland (1)	9,991	10,606	13,406	84,271	127,691	11,157	11,254	11,866	67,826	102,743
France	51,388	95,395	123,255	123,624	123,660	57,381	101,220	109,697	99,500	99,500
Germany	65,147	70,470	88,887	104,161	107,856	72,745	74,773	78,679	83,835	86,784
Greece	_	_	_	_	_	_	_	_	_	_
Hungary	2,071	2,976	4,397	6,989	9,338	593,448	766,130	986,276	1,415,969	1,863,189
Iceland	6,636	7,481	10,781	14,103	19,517	648,140	685,107	826,837	989,939	989,939
Ireland (2)	45,763	42,222	59,989	77,405	96,856	51,100	44,800	53,100	62,300	77,933
Italy	25,194	28,312	36,787	44,351	49,520	28,132	30,041	32,562	35,696	39,845
Japan (3)	580,519	561,645	658,255	710,048	864,707	70,523,704	70,348,819	76,315,700	76,789,529	95,201,699
Korea	..	8,438	9,884	11,516	14,652	..	10,556,819	11,771,111	13,188,395	15,007,017
Luxembourg	..	..	..	116	131	..	..	..	93	105
Mexico	26,600	33,643	37,213	42,718	55,095	248,558	325,008	401,536	481,897	599,965
Netherlands	411,460	374,875	545,239	659,839	779,843	459,446	397,767	482,623	531,077	627,481
New Zealand	7,687	7,865	9,094	11,157	12,446	18,308	17,015	15,673	16,836	17,683
Norway	6,831	7,652	10,227	16,939	20,266	61,427	61,107	72,383	114,161	130,541
Poland	4,622	7,588	11,487	17,022	26,325	18,936	30,973	44,665	62,144	85,135
Portugal	13,278	14,657	18,396	18,868	23,591	14,826	15,552	16,284	15,186	18,982
Slovak Republic (4)	0	0	7	7	291	0	0	272	..	9,038
Spain (5)	35,072	39,061	54,778	95,185	112,207	39,162	41,447	48,487	76,610	90,284
Sweden (6)	18,254	18,542	23,457	43,402	51,716	188,720	180,252	189,494	318,831	386,444
Switzerland	261,357	267,554	334,829	389,497	428,634	440,898	416,517	450,281	484,044	535,000
Turkey	..	..	..	209	919	..	..	..	298	1,232
United Kingdom (7)	1,040,472	1,040,472	1,175,335	1,467,118	1,541,100	722,391	..	719,638	800,692	847,785
United States	9,696,193	8,764,040	10,507,392	11,638,070	12,348,250	9,696,193	8,764,040	10,507,392	11,638,070	12,348,250
Total OECD	**12,962,197**	**12,056,030**	**14,559,182**	**16,496,220**	**17,914,971**					
Regional Indicators										
Total G10	**12,538,188**	**11,580,074**	**13,951,349**	**15,672,057**	**16,879,932**					
Euro area	**677,486**	**696,125**	**963,758**	**1,235,626**	**1,451,074**					
Memorandum: non-OECD countries										
Brazil	..	..	64,444	..	..	..	..	186,140	..	..
Bulgaria	83	173	331	553	776	183	326	513	794	1,117
Colombia	4,939	5,472	7,315	10,965	15,167	11,365,880	15,675,986	20,341,995	26,447,502	36,582,057
Estonia	..	15	90	234	449	..	227	1,116	2,684	5,145
Indonesia	..	278	..	..	..	..	2,486	..	..	..
Israel	28,624	27877	30,381	33,076	..	120,509	132,138	138,234	148,180	..
Slovenia	20	83	147	597	879	5,043	18,435	27,781	105,256	154,911
South Africa	..	..	57,337	82,756	..	..	..	380,718	465,915	..
Thailand	..	5,774	7,183	7,637	8,984	..	249,157	287,320	305,480	345,884

Source: OECD, Global Pension Statistics.

For further information, please contact the authors: Jean-Marc Salou (jean-marc.salou@oecd.org) or Yu-Wei Hu (yu-wei.hu@oecd.org), in the Financial Affairs Division, Directorate of Financial and Enterprise Affairs.
Thamar Kechichian, Consultant in the Financial Affairs Division, provided statistical and research assistance.
This document was prepared under the supervision of Juan Yermo, Coordinator of the Private Pension Unit at the OECD.

We are grateful to Ambrogio Rinaldi, Chairman to the OECD Working Party on Private Pensions and to José Pavao Nunes, Chairman to the OECD Task Force on Pension Statistics for their valuable comments on the newsletter.

Edward Smiley, Publications Officer in the Directorate for Financial and Enterprise Affairs provided editorial assistance.

This project is currently financially supported by voluntary contributions from both the public and private sectors, namely Allianz Global Investors, ABI (American Benefits Institute), COVIP, EFFAS-EBC, ING Group, Pioneer Investments and the Portuguese Pension Supervisory Authority.

SUBMISSION OF ARTICLES

Articles on statistical matters and related to funded pension from readers who wish to contribute to 'Pension Markets in Focus' are most welcome.

The Editors reserve the right to edit and publish manuscripts in accordance with the OECD's editorial requirements of this publication.

Deadline for articles for the next issue: 31 February 2007.

NOTES TO BE TAKEN INTO CONSIDERATION WHEN INTERPRETING THE DATA

Data includes pension funds per the OECD classification (Private Pensions: OECD Classification and Glossary. The Glossary is available at http://www.oecd.org/daf/pensions/.

All types of plans are included (occupational and personal, mandatory and voluntary) covering both public and private sector workers.

General notes

- Method of valuation: book value.
- G10 includes Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States.
- Euro Area includes 12 countries: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain.
- OECD countries exchange rates to Euro used: 1.12 in 2001; 1.06 in 2002; .89 in 2003; .80 in 2004 and 2005.
- All OECD countries exchange rates from OECD, Main Economic Indicators.
- Non-OECD countries' exchange rates and GDP data from the International Financial Statistics Yearbook, IMF.
- 2005 Data for Switzerland and the Netherlands are preliminary data.
- Data for Greece are close to zero.
- Conventional signs: 'n.a', not applicable; '..', not available, '_' close to zero.
- Erratum for Slovakia: units are corrected for this issue in comparison with Issue #2 where data appeared in thousands.

Specific notes

Chart 1:
(1) Pension reserve fund data are 2004 data.

(2) Life insurance data are 2003 data.

Note: Unallocated pension insurance contracts are excluded from pension funds' assets.

Table 1, Table 5 and Chart 2:
(1) Data for 2004 and 2005 include the statutory pension funds.
(2) Source: Irish Association of Pension Funds.
(3) Data do not include Mutual Aid Trusts; 2004 and 2005 data are estimates.
(4) 2004 pension assets data is 2003.
(5) Data for 2004 and 2005 include Mutual Funds.
(6) Includes assets from the premium pension system for 2004 and 2005. 2005 data are estimates.
(7) 2005 pension assets data is staff estimates; 2002 pension assets data is 2001.
Weighted total averages used for Tables 1, 5 and Chart 2 using weights of pension fund assets.

Table 3:
(1) Other investments include value of buildings (not for investment purpose), accounts receivable, provisions for liabilities covered by reinsurance, as well as accrued income and deferred expenses.
(2) Private Investment funds: of which 82.3% Hedge Funds and 17.7% Private Equity Funds.
(3) Other investments includes Mortgage bonds.
(4) Other investments include assets of affiliated companies (with a 100 percent holding) holding land and buildings.
(5) Other investments include short term payable and receivable accounts.
(6) Data are estimates; Private investment funds: of which 80.3% Hedge Funds and 19.7% Private Equity Funds.
(7) Other investments includes "reverse repo" investments.
(8) 2004 data.
(9) Other investments include security repurchase agreements, commercial paper, payments receivable and other miscellaneous investments.
(10) 2003 data.

Chart 4, 5A and 5B:
- For Finland, pension trusts that are providing supplementary pension benefits as well as benefits belonging to the compulsory social security are treated as pension funds per the OECD classification, not as a pension reserve fund.
- For Denmark, the fund of the Labour Market Supplementary Pension Scheme (ATP) is treated as a pension fund, not as a pension fund reserve per the OECD classification.

List of administrative sources

OECD countries	*Statistical source(s) by country*
Australia	Australian Prudential Regulation Authority
Austria	FMA Financial Market Authority
Belgium	Commission Bancaire, Financière et des Assurances
Canada	Statistics Canada
Czech Republic	Ministry of Finance
Denmark	Danish Financial Supervisory Authority
Finland	Insurance Supervision Authority
France	Ministry of Finance
Germany	Federal Financial Supervisory Authority
Greece	Ministry of Employment and Social Protection
Hungary	Hungarian Financial Supervisory Authority
Iceland	Financial Supervisory Authority
Italy	Commissione vigilanza fondi pensione (COVIP)
Ireland	Irish Association of Pension Funds
Japan	Ministry of Finance
Korea	Korea Life Insurance Association
Luxembourg	Commissariat aux Assurances
Mexico	Comisión Nacional del Sistema de Ahorro para el Retiro (CONSAR
Netherlands	Statistics Netherlands
New Zealand	Ministry of Economic Development
Norway	Kredittilsynet
Poland	Insurance and Pension Funds Supervisory Commission of Poland
Portugal	Instituto de Seguros de Portugal
Spain	Banco de Espana
Spain (1)	Ministry of Economy
Slovak Republic	Ministry of Finance of the Slovak Republic
Switzerland	Office fédéral de la statistique
Sweden	Finansinspektionen (the Swedish Financial Supervisory Authority)
Turkey	Directorate general of Insurance, Department for Private Pensions
United Kingdom	National Statistical Office (ONS)
United States	Department of Treasury
United States	Federal Reserve
Non-OECD members	
Argentina	International Federation of Pension Funds Administrators
Bolivia	International Federation of Pension Funds Administrators
Brazil	Ministry of Finance - SUSEP (Open-funds)
Brazil	Ministry of Social Security (Closed-funds)
Bulgaria	Financial Supervision Commission
Chile	International Federation of Pension Funds Administrators
Colombia	Superintendencia Bancaria de Colombia
Costa Rica	International Federation of Pension Funds Administrators
El Salvador	International Federation of Pension Funds Administrators
Estonia	Financial Supervision Authority
Hong Kong, China	Mandatory Provident Fund Schemes Authority
Indonesia	Ministry of Finance of the Republic of Indonesia
Kazakhstan	International Federation of Pension Funds Administrators
Peru	International Federation of Pension Funds Administrators
Singapore	Monetary Authority of Singapore
Slovenia	Slovene Insurance Supervision Agency
Slovenia	Slovene Security Market Agency
South Africa	Financial Services Board
Thailand	Securities and Exchange Commission
Uruguay	International Federation of Pension Funds Administrators

(1) Data coming from a secondary source was used to estimate investments by mutual pension entities.
Source: OECD Global Pension Statistics.

OECD invites public comment on draft guidelines on the funding and benefit security of pensions

The OECD is inviting public comment on draft guidelines to help governments and regulators improve the way certain types of pension funds are run in order to make workers' pensions more secure. They build on analysis from a series of policy papers that are being released with the guidelines and are part of a broader OECD effort to restore public confidence in pensions.

The draft guidelines contain a series of recommendations on how the funding of occupational pension plans, and in particular defined benefit pension plans, should be regulated. Such plans are common in Canada, Japan, the Netherlands, the United Kingdom and the United States, though many are now closed to new employees.

Issues covered by the guidelines include the funding and valuation of pension plans and how the money paid by employees into their company pension plan should be protected if their employer or the company that finances their pension plan goes bankrupt.

The deadline for comments was 15 September 2006.

The draft guidelines are available at: http://www.oecd.org/daf/pensions/funding-guidelines.

The policy papers (Benefit Security and Pension Fund Guarantee Schemes; Funding Rules and Actuarial Methods; Benefit Protection: Priority Creditor Rights for Pension Funds) are available at: http://www.oecd.org/daf/pensions.

Longevity risk

The length of time people expected to live in most OECD countries has increased by 25 to 30 years during the last century. These gains in life expectancy are good news. However, policy makers, insurance companies and private pension managers worry about the impact that these gains may have on retirement finances. As long as gains in life expectancy are foreseeable and they are taken into account when planning retirement, they would have a negligible effect on retirement finances. Unfortunately, improvements in mortality and life expectancy are uncertain. In this regard, longevity risk is associated with the risk that future mortality and life expectancy outcomes turn out different that expected.

As a result of this uncertainty surrounding future developments in mortality and life expectancy, individuals run the risk of outliving their resources and being forced to reduce their standard of living at old ages. Pension funds and life annuity providers (e.g. insurance companies), on the other hand, run the risk that the net present value of their annuity payments will turn out higher than expected, as they will have to pay out a periodic sum of income that will last for an uncertain life span. In this context, individuals bear the full extent of the longevity risk when this risk is 'uncovered'. However, private pension funds and national governments providing defined retirement benefits, as well as financial institutions providing lifetime annuity payments face this longevity risk.

The main purpose of this project is therefore to disentangle how uncertainty regarding future mortality and life expectancy outcomes would affect private pension liabilities and participants in the market for annuities. In this context, the project first focuses on the impact that longevity risk can have on employer-provided defined benefit (DB) private pension plans liabilities. Secondly, the project will look into the link between longevity risk, define contribution plans and annuity markets.

In order to assess the impact that longevity risk can have on employer-provided DB pension plans, the project first focuses on assessing the uncertainty surrounding future developments in mortality and life expectancy, i.e. longevity risk. Secondly, it examines the impact that longevity risk could have on the liabilities of employer-provided DB pension plans. This impact comes about through their guarantee annuity payments.

The second part of the project will focus on longevity risk and annuity markets. In particular, it first looks at how longevity risk can be priced and the role of longevity risk in the insufficient development of annuity markets. Difficulties in pricing longevity risk coupled with information asymmetries (e.g. adverse selection), taxation, as well as financial and prudential regulations, are affecting the provision of annuities. Secondly, it will focus on how financial markets manage the longevity risk. DB pension funds as well as financial institutions providing life annuities need instruments to hedge against longevity risk, Are financial markets providing these instruments? Should governments provide longevity-linked bonds?

The International Organisation of Pension Supervisors (IOPS), recent developments

The International Organisation of Pension Supervisors (IOPS) has seen its membership grow considerably and now boasts around 50 members and observers from more than 40 countries. The first major achievement of the organisation was the approval of a set of principles on pension supervision (available on the IOPS website - www.iopsweb.org).

Other ongoing work includes a major project on risk-based supervision, which is being carried out in cooperation with the World Bank, and a series of other projects including a study on issues related to cross-border supervision, a project on supervisory education, outreach and communication, work on licensing (conducted jointly with the OECD), an analysis of the use of IT technology in off-site supervision and the key issue of what information should be required for members of DC pension plans. The IOPS is also working with the OECD and ISSA to develop a database providing comprehensive information on regulatory and supervisory systems.

The IOPS has held several conferences jointly with the OECD, including the recent meeting in Chile covering private pension issues in Latin American. The series of conferences will continue with the 2006 IOPS Annual General Meeting and Conference to be held in Istanbul in

November and a workshop with leading global pension experts covering financial challenges relating to pensions, to be held in Amsterdam in March 2007.

The Need for a Dynamic Approach to Liability Driven Investing (LDI)[1]

LDI stands for „Liability Driven Investing" or "Liability Driven Investments". LDI generally refers to an investment strategy that is aligned with the liabilities. The main drivers for the recent attention that LDI has attracted are the deficits that many pension funds have accumulated over the last few years, the growing orientation of international accounting rules on market values for assets and liabilities (see IAS 19 or FRS 17) and regulatory changes (e.g. the introduction of minimum funding levels). One increasingly popular strategy to face these challenges is liability matching. It embodies a pure immunization strategy with respect to liabilities. In practice, liability matching presents a number of limitations. For example, (inflation-linked) bonds or swaps are only liquid up to a maturity of approx. 50 years and longevity risk cannot be effectively hedged. Another, probably more important limitation of the liability matching approach, is that it represents a risk-averse investment strategy which may not necessarily be optimal for a pension fund. In fact, liability matching in an asset-liability context is equivalent to investing in risk-free asset in an asset-only context.

In order to enhance the performance of assets (e.g. to reduce contributions), it is necessary to include asset classes into the strategic asset allocation that are not perfectly correlated with liabilities, e.g. stocks or hedge funds. Depending on the investor's risk preference he will choose either a balanced investment portfolio with moderate risks („Liability Balanced-Portfolio") or an aggressive investment portfolio with higher risks and higher return expectations (e.g. the „Liability Opportunity-Portfolio") relative to liabilities.

Due to accounting and regulatory requirements, a portfolio which promises a higher return in the long run can only be chosen when short-term risks are controlled. In fact, it has to be ensured that the funding level does not fall below a certain threshold level over time. Dynamic LDI strategies provide a solution for this problem: depending on the available risk budget (e.g. reflected by a predefined funding level), the asset allocation is dynamically adjusted over time. The DSP-LDI strategy developed by risklab germany provides a tool to hedge liability risks by holding a portfolio with matching character in times when risk budgets are low (e.g funding levels are low) and, in times when risk budgets are high, it provides return opportunities by holding a portfolio with liability opportunity character. The DSP-LDI strategy includes not only pro-cyclic but also anti-cyclic elements and combines the return advantages of an aggressive strategic asset allocation with the risk advantages of a liability matching strategy.

[1] This article was prepared by Dr. Reinhold Hafner and Dr. Wolfgang Mader, from risklab germany. risklab germany develops and implements innovative asset management solutions. For more details, see www.risklab.de.

PAST 2006 MEETINGS ON FUNDED PENSIONS

OECD/IOPS Conference on Private Pensions in Latin America (Santiago, Chile, March 29-30, 2006)

The OECD/IOPS Conference on Private Pensions in Latin America was held in Santiago on 29-30 March in co-operation with the Superintendency of Pension Fund Administrators of Chile. It gathered participants from 17 OECD member countries (including the Chairman of the Working Party on Private Pensions), 16 non-OECD member countries (including 10 Latin American countries) and 6 international organizations. The conference covered a wide range of important issues including 1) Pension Reform in Chile after 25 years; 2) Private Pension Regulation in an International Context; 3) Challenge of Coverage; 4) Payout Phase of Pension Systems; 5) Risk Management in a Defined Contribution World; 6) Risk Based Supervision in pension systems; 7) Challenge of Investment Choice and Costs.

OECD Conference on Financial Education (New Delhi, India 21-22 September 2006)

Building on the OECD's leading work in the field of Financial Education, a major international conference on the issue was held in New Delhi, India, hosted by the Pension Fund Regulatory and Development Authority. The meeting was attended by 50 international representatives from 13 countries and international organisations, as well as 75 high-level representatives from the Indian authorities (including the Chairman of the Reserve Bank of India and the head of the Insurance Regulatory and Development Authority). In addition to providing an opportunity to present the principles and good practices developed by the OECD in this area, the conference addressed a wide range of issues related to the development of education programmes for specific financial topics – including financial markets, private pensions and insurance - and also covered policy issues related to public awareness campaigns and the disclosure of information.

Expert Meeting on the Regulation and Development of Occupational Pensions in China (Beijing, China 26-28 September 2006)

Continuing its proactive outreach work, the Working Party on Private Pensions undertook an expert meeting on occupational pension funds with the Ministry of Labour and Social Security in China. The issues of pension fund governance and the role of trustees, collective pension funds and monitoring investment risk were covered by a panel of OECD and international experts, as well as representatives from the Chinese pension fund regulatory commissions and private financial sector institutions. An ongoing project is planned with the Ministry of Labour, ensuring that further Chinese pension fund legislation is in line with OECD and international good practice, and providing international experience into how to develop the occupational pension fund market.

FORTHCOMING 2006 OECD MEETINGS ON FUNDED PENSIONS

N.B. Unless otherwise indicated attendance at OECD meetings is by invitation only.

- OECD/IOPS Global Forum on Private Pensions
(Istanbul, Turkey, 7-8 November 2006)

- OECD International Seminar on Pension Fund Regulation and Risk Management
(Istanbul, Turkey, 9 November 2006)

- OECD Working Party on Private Pensions
(Paris, France, 11 December 2006)

- OECD Task Force on Pension Statistics
(Paris, France, 11 December 2006)