



OECD Working Papers on Insurance and Private Pensions  
No. 36

Private Pensions and Policy  
Responses to the Financial  
and Economic Crisis

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<https://dx.doi.org/10.1787/224386871887>



**PRIVATE PENSIONS AND POLICY RESPONSES  
TO THE FINANCIAL AND ECONOMIC CRISIS**

**Pablo Antolin and Fiona Stewart**

**April 2009**

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## ABSTRACT/RÉSUMÉ

### **Private pensions and policy responses to the financial and economic crisis**

This paper discusses responses to current financial and economic crisis by regulators, supervisors and policy makers in the area of private pensions. These responses are examined in the light of international guidelines, best practices and recommendations to improve the design of private pensions.

*JEL codes: D14, D91, E21, G11, G38, J14, J26*

*Key words: Private pensions, defined contribution, defined benefit, regulation, supervision, funding and solvency rules, risk management.*

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### **Pension privées et réponses politiques à la crise financière et économique**

Ce document examine les réponses apportées à la crise financière et économique par les régulateurs, les superviseurs et les responsables politiques dans le domaine des pensions privées. Ces réponses sont examinées à la lumière des meilleures pratiques, des recommandations et des principes internationaux en vue d'améliorer la conception des systèmes de pension privées.

*Codes JEL : D14, D91, E21, G11, G38, J14, J26*

*Mots clés : pension privées, plans de retraite à cotisations définies et à prestations définies, régulation, supervision, règles de financement et solvabilité, gestion des risques*

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## EXECUTIVE SUMMARY

The current financial crisis has had a major impact on global pension assets, with the OECD estimating declines of \$5.4tn (over 20%) at the end of 2008. This is putting pressure on funding levels for defined benefit pension plans, and has served a severe blow to members of defined contribution (DC) plans close to retirement, denting confidence in many DC systems.

The policy responses to the crisis have been quite diverse across OECD and non-OECD countries. This paper examines these responses in the light of international guidelines, best practices and recommendations to improve the design of private pensions, suggesting the following main messages:

- **Stay the course: complementary private provision for retirement remains a necessity**
  - Some governments are being pressured to retreat from private pension...
  - ...but public PAYG systems face sustainability problems given ageing populations and are also affected by the crisis as unemployment increases.
  - Private pensions still have a major role to play to maintain balanced sources of retirement income
- **Saving for retirement is for the long-term**
  - Some flexibility allowing access to pension assets may be necessary in difficult economic times...
  - ...but should be strictly controlled to avoid too much 'leakage' from the system
  - Reducing contributions also risks creating a long-term shortage of pension assets
- **Supervisory oversight should be proportionate, flexible and risk-based**
  - Monitoring of pension funds has been strengthened by most authorities (via stricter stress testing, more frequent on-site visits and increased reporting)
  - Coordination – with industry, government ministries and other regulators - has also been stepped up
  - Supervisory oversight should be risk-based, focusing on the main threats facing pension fund beneficiaries and the pension system as a whole
- **Funding and solvency rules for defined benefit plans should be counter-cyclical.**
  - Flexibility in meeting funding requirements has been shown by authorities (longer time for recovery plans etc.)...
  - ...thereby avoiding 'pro-cyclical policies' and allowing pension assets to act as long-term investors and potentially stabilizing forces within the global financial system
  - Debate has reopened over whether mark-to-market accounting rules should be suspended

- **Use the safety net to address issues of insufficient income at retirement.**
  - Public provisioning should provide adequate pensions for low income workers
  - ‘Top ups’ for DC accounts are hard to administer affordably or fairly
  - Incentives to keep working and to increase contributions would help rebuild pension assets
  
- **Improve the design of defined contribution plans, including default investment strategies.**
  - Default, life-cycle funds can help protect those close to retirement
  - Guarantees for DC accounts may help – but it is unclear what level is necessary or who would pay for these?
  - Flexibility should be allowed in the timing of annuity purchases
  
- **Improve the governance and risk management of pension funds**
  - Pension fund risk management needs to be strengthened to reduce exposure to unduly risky investments
  - Pension fund governance needs to be improved to avoid exposure to assets not fully understood
  
- **Step up disclosure and communication and Improve financial education**
  - National campaigns to explain the long-term nature of pension assets are required to rebuild confidence in pension systems
  - Better disclosure of performance and costs is also necessary
  - Financial education is needed to help beneficiaries (and to some extent pension funds) improve the understanding of investing, risk and return, etc.

## PRIVATE PENSIONS AND POLICY RESPONSES TO THE CRISIS<sup>1</sup>

By Pablo Antolin and Fiona Stewart<sup>2</sup>

### The impact of the financial and economic crisis

The financial turmoil and the ensuing economic crisis have had a major impact on private pension assets. The current economic and financial crisis has reduced the value of assets accumulated to finance retirement by around 20-25% on average according to the latest OECD figures. However, there is large variability across countries, varying from positive but small returns in some countries to falls over 30% in Ireland and the United States (Annex). This variability is explained in part by differences in portfolio compositions, as well as the regulatory environment (OECD Private Pension Outlook, 2008). Additionally, the increase in unemployment stemming from current economic conditions will reduce the amount of pensions' savings, which will negatively affect future retirement incomes.

The crisis is also causing a shift in asset allocation patterns, with investors moving into more conservative investments – a trend which has been noted by pension regulators in OECD countries such as Norway, Slovakia, Spain and Turkey and in other areas (e.g. Kenya, Bulgaria, and Costa Rica – where domestic investments have increased). Such moves risk locking in portfolio losses and could also reduce the potential of funds to generate retirement incomes in future. For the longer term, regulators expect conservative investment strategies to set in as “bad outcomes”, as the one experienced in 2008, will have more weight in long-term strategies than in the recent past.

The fall in the value of assets accumulated for retirement affects on one hand the solvency of pension plan sponsors and the funding levels of plans providing defined benefit (DB) pensions. On the other hand, it reduces the amount of money that individuals have accumulated in defined contribution (DC) pension plans to finance their retirement.

The funding levels of pension funds providing DB pensions have fallen well below 90% in most OECD countries. As a result, the value of their assets fails to cover their pension liabilities. For example, many US companies had funding levels in 2007 were close to 100% following the requirement of the Pension Protection Act to bring the funding of their pension plans to at least 92% by 2008. However, as a

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<sup>1</sup> This paper has been prepared in the context the ‘*OECD strategic response to the financial and economic crisis*.’ It builds on responses to an OECD/IOPS questionnaire provided by pension regulatory and supervisory authorities in the following economies: Albania, Austria, Australia, Belgium, Bulgaria, Canada (provincial level), Chile, Czech Republic, Columbia, Costa Rica, Egypt, Finland, Germany, Greece, Hong Kong – China, Hungary, Ireland, Jamaica, Japan, Kenya, Korea, Lithuania, FYR Macedonia, Mexico, the Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Spain, Sweden, Swaziland, Switzerland, Thailand, Turkey and the UK.

<sup>2</sup> Pablo Antolin and Fiona Stewart are, respectively, principal economist and administrator in the Financial Affairs Division of the OECD's Directorate for Financial and Enterprise Affairs. The authors would like to thank André Laboul, Juan Yermo and delegates to the OECD Working Party on Private Pensions and to the IOPS for helpful comments. The paper is issued under the responsibility of the OECD Secretary General. The authors are solely responsible for any errors.

result of the crisis, companies have fallen behind this target. The Dutch regulator (DNB) and the Dutch Association of Industry-Wide Pension Funds (VB) report that the coverage ratio in most pensions funds in the Netherlands have drop below 95% versus their minimum requirement of 105%. Funding levels in the UK have dropped from around 94% at the end of March 2007 to 85% at the end of March 2008. Whilst funding in countries such as Belgium and Finland remains in positive territory, levels have also declined over the last year (to around 115% from 130%). For the longer term, there is an expectation that the crisis will accelerate the trend for plan sponsors to close their DB arrangements, and there is a risk that individuals in countries where benefit guarantee schemes do not operate, could lose their retirement income should their employer become bankrupt.

The loss of value of assets accumulated in DC pension plans materializes once people sell. The main concern is with older workers who will have to retire soon, and retirees that are currently financing their retirement using their accumulated balances. These groups may have to take part of their losses, finding themselves with much lower incomes in retirement compared with just a few months ago.<sup>3</sup> Their situation is compounded if their exposure to equity is relatively high. In this regard, the crisis has severely dented the confidence of investors in many countries in DC systems, with some countries suggesting a decline in contributions to voluntary schemes.

## **Policy responses to the crisis**

The policy responses to the crisis have been quite diverse across OECD and non-OECD countries (Tables A1 to A3 in the annex). These responses are examined in the light of international guidelines, best practices and recommendations to improve the design of private pensions.

### **➤ Stay the course: complementary private provision for retirement remains a necessity.**

The crisis has not diminished the importance of private pension provision in a well balanced pension system. Private pensions are necessary to diversify the sources of income at retirement and, as such, they complement public pensions. Moreover, the sustainability problems facing public pensions in some countries remain challenging. As a result of the large projected increases in public pension expenditures in the near future,<sup>4</sup> retirement income from public sources is expected to continue to decline, and therefore private pensions need to be expanded further to bolster income replacement rates in retirement (Figure 1).

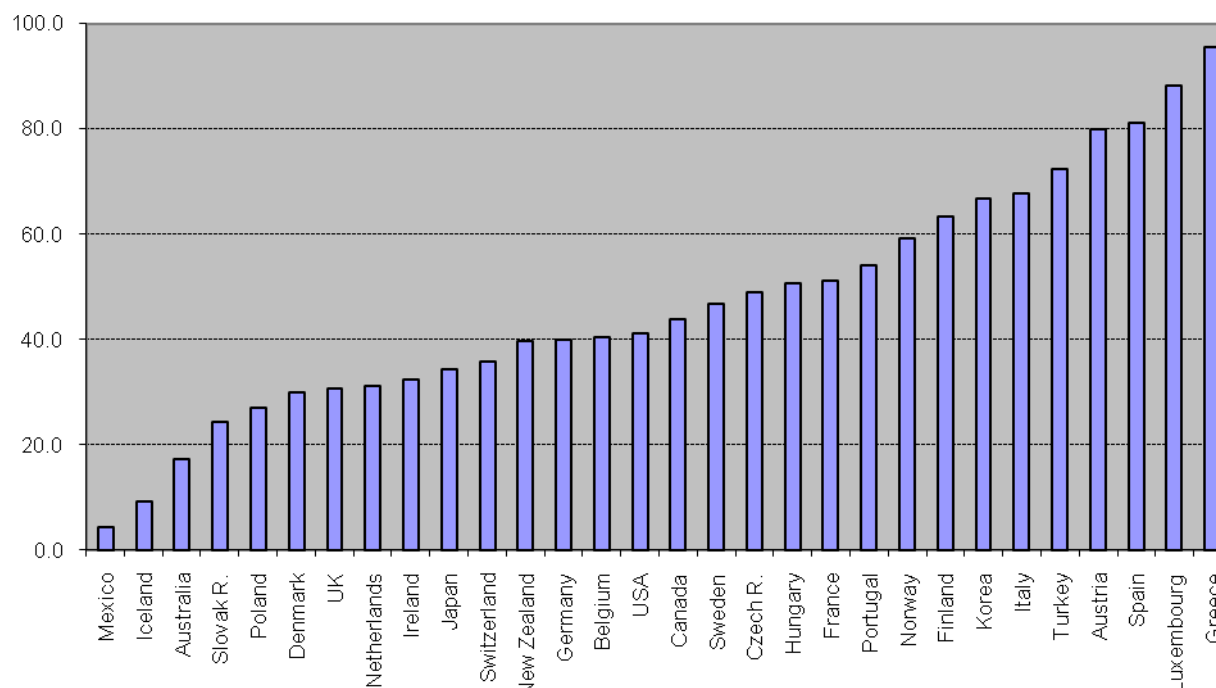
Some governments are - or are being pressured – to retreat from private pension provisions. For example, Argentina has de facto nationalised private pensions, and there are policy discussions about reverting back towards PAYG public pensions in some Central and Eastern European countries (allowing individuals to reverse their previously decision to opt out of the public system and join the new, individual account arrangements). However, the sustainability problems of public pensions will be compounded were these systems to take on more promises.

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<sup>3</sup> Preliminary results on the impact of the timing of retirement on DC pensions show that replacement rates from DC plans can be quite volatile (see annex). Moreover, those retiring at the end of 2008 would have a much lower replacement rate than those retiring a year before even though they have the same labour histories.

<sup>4</sup> Most countries project important increases in public pension expenditure for the next 40 to 50 years as a result of ageing populations (e.g. European Commissions Working Group on Ageing). The latest (but not recent) OECD numbers are provided in the annex (figure A2).

**Figure 1. Gross replacement rates in public pension plans**



Source: OECD Pensions at a Glance, 2007

Notes: Gross replacement rate for an individual entering the system in each country at age 20 with average worker earnings.

### ➤ **Saving for retirement is for the long-term.**

The OECD classification and glossary of private pensions<sup>5</sup> states that “*a pension (or retirement income) plans (arrangement or scheme) is a legally binding contract having an explicit retirement objective (or – in order to satisfy tax-related conditions or contract provisions – the benefits can not be paid at all or without a significant penalty unless the beneficiary is older than a legally defined retirement age).*”

In the context of the current crisis, the call for some flexibility and access to pension assets in the face of severe economic difficulties is understandable. However, policies allowing temporary or early access to private pension savings (as have been introduced, for example, in Australia, Iceland, Spain and are being considered in Turkey, or have been marginally extended, as in Australia) for those in dire financial difficulties (e.g. the unemployed) could endanger the future adequacy of retirement income.

Additionally, policy measures decreasing contributions to personal accounts also risk permanently reducing future retirement income. Assets accumulated in DC pension plans risk falling short of financing an adequate level of retirement where countries allow employers to stop making matching contributions to personal occupational account (such as in the US), revoke approved increases in contribution levels (as has been the case in Romania) or decide to reduce overall contribution levels (which has been decided in Lithuania).

<sup>5</sup> <http://www.oecd.org/dataoecd/5/4/2496718.pdf>



Finally, regarding the governance and investment of public pension reserve funds, the OECD recommends that these funds should have a specific investment goal, which is usually defined as a rate of return objective (and associated risk) over a certain time horizon.<sup>6</sup> The objective of public pension reserve funds is to meet, as far as possible, the future pension costs to national budgets that will result due to the ageing of populations. Therefore, the use of these accumulated funds for other purposes - even those driven by the current financial crisis, (e.g. the use of the Irish National Pension Reserve Fund to recapitalize banks) - does not meet the specified aims of these funds and risks undermining the sustainability of pension promises in future.

➤ **Supervisory oversight should be proportionate, flexible and risk-based**

As an immediate response to the crisis, pension regulatory and supervisory authorities have increased the monitoring and supervisory activities of pension funds around the world. For example, the German federal financial supervisory authority, BaFin, has stepped up its stress testing with a sample of the largest German insurers and pension funds, reporting their liquidity, (group-) solvency margin, the assets covering technical provisions and any other key risks on a weekly basis. The authorities in Portugal and Slovakia have also introduced stricter scenario testing. Monitoring of exotic assets, offshore investment and counterparty risk have been highlighted by the supervisory authority in Thailand and Spain, stepping up both “on-site” and “off-site” inspections; the Swedish financial authority has increased the frequency of analysis of solvency, whilst the authority in Lithuania installed a new IT system at the start of 2009 to aid information gathering. Meanwhile, a risk-based approach to supervision has been introduced in Costa Rica and in Albania and is being extended in Poland and Kenya (Table 2). Finally, in several countries regulators and supervisors have held special meetings with selected pension funds (e.g. Canada, Italy, Thailand) in order to assess the impact of the crisis.

Coordination between supervisory authorities and dialogue with the pension industry has also increased in some jurisdictions. For example, communication between supervisors and pension funds has increased in some Canadian provinces (such as Alberta) and between the Swedish Financial Supervisory Authority, industry and with policy makers. In Spain, meetings between supervisors and industry participants (e.g. INVERCO, the Spanish Association of Investment and Pension Funds) have been held to discuss problems faced, including asset valuation and liquidity problems whilst the FSA in Norway see close dialogue with supervised entities and the trade organizations as crucial to a successful supervisory handling of the crisis. In Poland cooperation has intensified between the pension supervisor and other financial sector authorities, whilst the pension supervisor in Romania note they are signatories to an EU MoU on cross – border financial stability. The FSC in Bulgaria holds communication and exchange of information with the relevant expert groups within the Ministry of Finance and the Bulgarian National Bank, and the Pensions Regulator in the UK is also working closely and in tandem with officials and members of all the major Government ministries and other regulators. CONSAR in Mexico have been in contact with legislators in order to explain that the main concerns raised by politicians are of a transitory nature and that it may not be advisable to overact with stiff policy measures. The issue of uniting financial regulatory authorities has been raised in Lithuania, and the formation of a national regulator has been raised in Canada.

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<sup>6</sup> Yermo, J. (2008), "Governance and Investment of Public Pension Reserve Funds in Selected OECD Countries", *OECD Working Papers on Insurance and Private Pensions*, 15.  
<http://www.oecd.org/dataoecd/26/53/40194872.pdf>

As the pension supervisory authorities around the world have shown, oversight during a time of financial instability needs to be stepped up and to focus on the main risks facing pension fund beneficiaries and the pension system as a whole. Supervisory authorities also need to ensure that their response is proportionate, not placing too high burden on supervised entities, or on plan sponsors, which could risks adverse effects (such as forcing the closure of funds).

The IOPS Principles of Private Pension Supervision recommend that pension supervision should be risk-based.<sup>7</sup> The Principles also state that pension supervisory authorities should have sufficient resources and powers to fulfill their objectives, and that they should act in transparently, coordinating with industry and other authorities.

➤ **Funding and solvency rules for DB plans should be counter-cyclical.**

The OECD Guidelines on Funding and Benefit Security state that “*The legal provisions should not prevent funding methods that seek to dampen the short term volatility in firms’ funding contributions.*”, and allow for temporary reprieves to be granted by regulatory authorities (3.5). Moreover, (3.6) states that “*Funding rules should aim to be countercyclical, providing incentives to build reserves against market downturns.*” The Guidelines also allow the position of the plan sponsor to be taken into funding considerations (3.1).

Pension regulatory and supervisory bodies, in permitting pension funds flexibility in meeting funding requirements and other regulation, avoid “pro-cyclical policies’ and allow pension assets to act as long-term investors, and potential stabilising forces within the global financial system. However, in allowing for this flexibility in meeting funding requirements it is important to distinguish between temporary impacts of the economic cycle on sponsor cash flows and long-term structural changes to strengthen the scheme sponsor. In ensuring long term funding levels a number of different measures may be appropriate. This could include solvency rules that aim at increasing funding levels in good times to have higher coverage rates of future pension liabilities well above a hundred percent. These funding levels will act as a buffer in bad times when they could be allowed to temporally fall below a hundred percent.<sup>8</sup> It may also include a range of other security mechanisms designed to protect scheme assets and members, such as employer covenant and guarantee schemes. Such diverse policies and flexibilities aim to avoid placing intense pressure on plans sponsors facing difficult financial conditions, which could lead to the closure of pension plans, or, in the face of extreme calls for pension contributions,<sup>9</sup> could even force the sponsor into bankruptcy.<sup>10</sup>

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<sup>7</sup> <http://www.iopsweb.org/dataoecd/59/7/40329249.pdf>

<sup>8</sup> Nevertheless, in the case of cross-border activity within the European Union, according to the IORP Directive, a pension fund has to be fully funded at all times.

<sup>9</sup> For example, a provincial regulator reports that many firms in Canada with actuarial valuations due in 2009 are faced with increased contributions of 100% to 150%.

<sup>10</sup> While it is important to understand what it is reasonable for the sponsor, all unsecured creditors must be treated equitably and the pension scheme should not be put in disadvantaged, for example in order to allow sponsors to continue paying dividends to shareholders. In the UK, for example this important balance has been identified through a high profile statement to employers sponsoring DB pension schemes in February 2009.

Making funding and solvency rules counter-cyclical may present consistency problems as they depend on stakeholder consensus. Namely, flexibility in funding during difficult market conditions must be matched by a consensus to increase contributions during better economic times, which may be perceived later on as a drag on economy recovery or as depressing wage improvements. Unless funding and solvency increases occur as market conditions improve, DB plans will remain endemically underfunded.

The IOPS Principles also recommend that supervisory authorities act proportionately, in a risk-based manner and encourage a flexible response.<sup>11</sup> As Principle 5.1 states: “*Pension supervisory authorities should be proactive, seeking to avoid significant problems before they occur and intervening, in a proportionate way, at as early a stage as possible and searching for those supervisory instruments which had most value to the desired supervisory result*”, whilst 6.3 advises that: “*In fulfilling its supervisory powers, the pension supervisory authority should give pension funds and plans flexibility, where appropriate, in the way they achieve compliance with regulatory requirements.*”

In this context, recent policy responses introducing such needed flexibility include the extension of the time required to submit recovery plans and the lengthening of recovery period for pensions funds from three to five years allowed by the Dutch government, the new US legislation easing temporarily the funding requirements for employer-sponsored pension plans included in the 2004 Pension Protection Act; the Canadian authorities considering increasing solvency funding periods from 5 to 10 years. The Irish Pension Board is taking numerous measures including temporarily granting additional time for the preparation of funding proposals, dealing as flexibly as possible with applications for approval of funding plans, and is allowing longer periods for recovery plans (i.e., greater than ten years), in appropriate circumstances and taking into account voluntary employer guarantees in approving recovery plans. Pension funds in Norway had 3 years to increase their premium reserves as a result of new mortality statistics, but in light of the current crisis this period has been extended to 5 years. In Finland a new bill (passed in December 2008) aims at securing the solvency requirements of pension funds without leading to forced sales of equities in a disadvantageous market position, with these legal provisions remaining in place until the end of 2010.

The Pension Protection Fund in the UK has also been debating allowing deferrals of levy payments. Though such flexibility may be warranted, OECD analysis of guarantee schemes stresses the need to ensure that levies are properly risk-based in order for these funds to operate effectively.<sup>12</sup> In Jamaica, amendments to legislation propose that private pension plans be given preferred creditor status upon the winding-up of companies.<sup>13</sup>

Additionally, in the context of funding and solvency the debate over accounting rules has been reopened by the crisis. For example, the Czech authority notes that the adoption of full mark-to-market valuations has been postponed due to the extreme volatility currently being experienced. Meanwhile, the Spanish Ministry of Finance has undertaken studies on using held-to-maturity valuations, using expiry dates instead of mark-to-market prices. Furthermore, the discussion about appropriate discount rates has also been heightened by the crisis (in particular in countries

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<sup>11</sup> <http://www.iopsweb.org/dataoecd/59/7/40329249.pdf>

<sup>12</sup> See OECD Working Paper No.5, ‘Benefit Security: Pension Fund Guarantee Schemes’ <http://www.oecd.org/dataoecd/38/63/37977335.pdf>

<sup>13</sup> For a discussion of the status of pension creditors in bankruptcy, see OECD Working Paper No.6, ‘Benefit Protection: Priority Creditor Rights for Pension Funds’ <http://www.oecd.org/dataoecd/39/0/37977393.pdf>

such as the Netherlands, Sweden and the UK). Liabilities in DB pension funds have experienced much volatility as a result of falls in corporate triple-A bonds, government bonds or the swap curve. Conversely, future market increases in interest rates have the potential to diminish pension liabilities and related annuity costs.

The OECD Guidelines on Pension Fund Asset Management<sup>14</sup> state that pension fund assets should be valued on a proper, transparent and disclosed basis. The guidelines also recommend that if the smoothing of asset prices is used, regulators and supervisors should make sure that they understand the potential impact of such techniques. In terms of discount factors, the OECD Guidelines on Funding and Benefit Security state that these should be prudently chosen taking into account the plan liabilities' risk and maturity structure.

➤ **Use the safety net to address issues of insufficient income at retirement.**

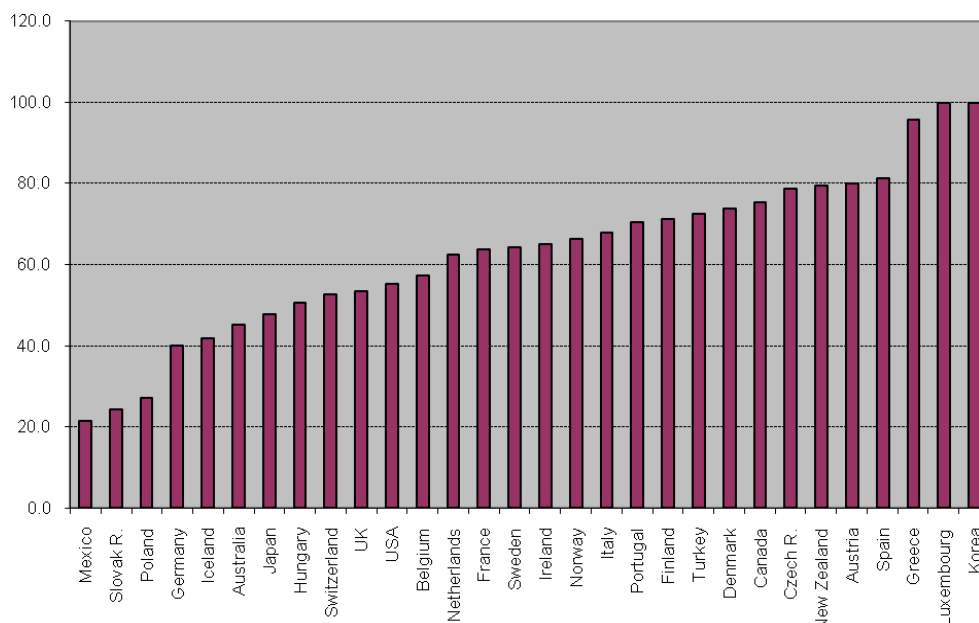
Countries should address issues related to unemployment and poverty which arise from the current financial crisis primarily via their publicly funded safety nets (e.g. unemployment insurance, minimum income provisions). The OECD's Pensions at a Glance<sup>15</sup> modeling work warns that there is a risk of elderly poverty in some countries (figure 3). Some countries' authorities have consequently been revising their social safety nets. For example, the Finnish government has announced a guaranteed minimum pension will be introduced from 2011, whilst the Mexican government is considering reforms to redistribute government contributions to lower income workers' accounts. Chile approved a comprehensive reform before the crisis introducing a solidarity or basic pillar that provides protection to lower income groups, including those receiving low pensions.

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<sup>14</sup> <http://www.oecd.org/dataoecd/59/53/36316399.pdf>

<sup>15</sup> OECD (2007), Pensions at a Glance.

**Figure 2. Gross replacement rates in public pension plans**  
(Low income individuals: half average worker earnings)



Source: OECD Pensions at a Glance, 2007

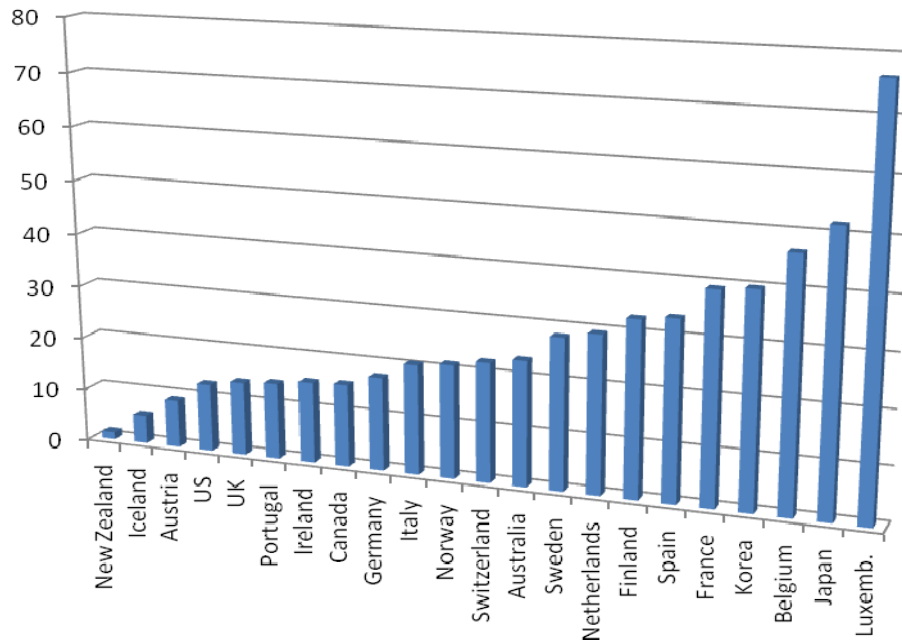
Notes: Gross replacement rate for an individual entering the system in each country at age 20 and earning half average worker earnings.

Given the recent declines in DC accounts, there have been increasing calls on governments (e.g. in Israel) to provide some type of “bail out” or top up for pensions, as have been seen in other financial sectors. These calls focus in particular on people with pensions from DC plans near retirement or in retirement and in countries that lack formal safety nets (e.g. developing countries). However, such top ups could be costly, difficult to implement fairly (should every one get a top up or only those near or in retirement?), and risk introducing misalignments into the system (e.g. by encouraging overly risky investment in the future). If such policies are utilized, they should be carefully designed and it should be made very clear that they are a one-off, temporary measure.

Individuals who have seen the value of their accumulated assets eroded as a result of the equity market falls may need to postpone their retirement and continue contributing to their pension funds in order to rebuild enough assets to finance an adequate retirement income.<sup>16</sup> Governments may wish to allow increased levels of tax incentives (as is being considered in Turkey) or contributions levels (as is being considered for DC schemes in Japan), and should examine their labour policies carefully to make sure that incentives for early retirement, and disincentives for later retirement, are not build into the system (figure 4).

<sup>16</sup> Removing barriers to extended work will allow people more time for additional contributions and for recouping losses. Removal of these barriers (e.g. age discrimination and labour stratification), as well as policies to retrain workers, present broad labour market challenges that go beyond pension design.

**Figure 3. Incentives to retire: implicit tax of working an extra 5 year.**



Source: OECD Economic Studies No. 37 (2004), Chapter 1.

Notes: Average implicit tax rates on continued work over the next five years in old-age pension systems from age 61 to 65, for a single worker with average production worker earnings as a percentage of annual earnings. These figures are under revision by the OECD as some countries may have recently passed reforms reducing incentives to retire.

➤ **Improve the design of DC plans, including default investment strategies.**

One way of improving protection in DC schemes is through the careful design of default investments and payout options. These could include the use of ‘life cycle’ funds (i.e. shifting to more conservative assets as retirement approaches) as well as investment policies to prevent people close to or in retirement having large equities exposures. Moreover, the current crisis has also highlighted the importance of communicating these default strategies and the risks involved. One example of such policy was seen when the previous Israeli government gave regulators six months to mandate a more conservative system for investing older workers’ pension savings. Additionally, several countries seem supportive of introducing or encouraging life-cycle funds (e.g. US).<sup>17</sup> However, it should be noted that life-cycle investing needs to be implemented carefully as such strategies do still involve timing risk (*i.e.* when moving from one asset allocation stage to the next). Some flexibility in when portfolio shifts occur may be included, and the suggestion current being considered in Chile to allow individuals to choose more or less ‘aggressive’ life cycle paths is also an interesting proposal.

<sup>17</sup> However, some countries (e.g. Hungary) note that the current market context requires to postpone the introduction of life-cycle funds as such arrangements would increase equity weightings – due to the minimum equity allocations required in these funds.

Regulation relating to voluntary pensions needs to be considered in light of the pension system as a whole. For example, when public pensions already provide protection from longevity risk and a minimum adequate level of retirement income, regulators may allow individuals more flexibility in their choice of investments than when assets accumulated in DC plans are the main source of retirement income, in which case the protection offered by life-cycle funds coupled with default options that focus on reducing the risk of “worst case” scenarios, may be required.

Another debate opened by the crisis is whether guarantees should be introduced in DC accounts – as already operate in some countries. However, questions on who provides such guarantees, how much they cost and whether they may encourage conservative investment (and herding) need to be addressed. Moreover, guarantees will not eliminate market fluctuations in replacement rates, unless limits are quite high (well above the riskless rate of return). Unfortunately, only insurers that are willing to bear more risk than the average market’s aversion to risk (*i.e.* more than other investors) could guarantee such high guarantee returns, which raises the issue of counterparty risk.<sup>18</sup>

Mechanisms for increasing risk-sharing within DC systems also need to be explored further. For example ‘collective DC plans’ and other hybrid designs drawing on both DB and DC mechanisms.<sup>19</sup>

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<sup>18</sup> Center for Retirement Research (2009): “What does it cost to guarantee returns?” No. 9-4

<sup>19</sup> Forthcoming OECD papers on ‘*Evaluating the Design of Private Pension Schemes*’ and ‘*Investment Regulations and Retirement Income from DC Pension Plans*’ will address these issues.



➤ **Allow for more flexibility in the payout phase and avoid materializing losses by selling at the bottom of the market**

Recent OECD reports recommend flexibility in the design of the payout phase of DC pension plans when protection from longevity risks is already provided by public and DB plans.<sup>20</sup>

In this context, measures that increase flexibility in the timing of buying an annuity, in particular in countries where annuitization is mandatory (such as the recent two year extension in Ireland or the flexibility in mandatory annuitization announced by the UK, where already for most people annuities do not have to be taken until age 75) permit people near retirement to avoid locking in losses (liquidating their assets when markets are down) and buying an annuity when interest rates are low (i.e. their accumulated assets will buy an annuity that will pay lower monthly payments). A more flexible system for purchasing annuities has also been introduced in the Netherlands, allowing one-half of accumulated capital to be used to purchase an immediate 5-year annuity, deferring the rest of the purchase after this date.

➤ **Improve the governance and risk management of pension funds**

Some of the decline in assets recently experienced by pension funds around the world may well have been avoided through better pension fund governance and stronger risk-management systems. Some funds seem to have been exposed to instruments whose risk profiles they did not fully understand. The current financial turmoil has therefore highlighted the importance of proper risk systems, controlling investments and other risks, which shows that sound risk architecture of pension funds is essential for their prudent operation and the stability of the financial system as a whole. The OECD Guidelines on Pension Fund Governance<sup>21</sup> state that: *“The governing body should collectively have the necessary skills and knowledge to oversee all the functions performed by a pension fund, and to monitor those delegates and advisors to who such functions have been delegated. It should also seek to enhance its knowledge, where relevant, via appropriate training.”*

Pension supervisory authorities have an important role to play in this respect. Pension fund governance and risk-management can be improved via increased oversight by supervisory authorities, and through their providing guidance on good practices to pension funds. The IOPS Guidelines for the Supervisory Assessment of Pension Funds<sup>22</sup> note checking a pension fund's

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<sup>20</sup> OECD Working Papers on Insurance and Private Pensions No. 25, 2008: "Policy Options for the Payout Phase" <http://www.oecd.org/dataoecd/39/2/41407986.pdf>

<sup>21</sup> <http://www.oecd.org/dataoecd/18/52/34799965.pdf> **Annotation to Guideline 8:** *The governing body should regularly review its collective skill set and consider whether it is adequate. Where relevant, it should seek to enhance its collective knowledge of pension fund matters via appropriate training, paid for by the pension entity. In general, training is recommended both initially on appointment and on an on-going basis (at least every two years). Such training could be supported by pension fund regulatory or supervisory bodies (for example via free on-line courses, other material or approval of other education providers). Alternatively, the supervisory authorities may identify or approve suitable courses. More advanced training may be needed to ensure that the governing body fully understands investment in complex financial instruments.*

<sup>22</sup> <http://www.iopsweb.org/dataoecd/38/47/41042660.pdf>



risk management systems as a key supervisory objective and an important part of an in-depth analysis. In Spain, for example, the Ministry of Finance has strengthened the monitoring of pension entities' internal control mechanisms, codes of behaviour and risk management systems, whilst the Portuguese authorities note that the regulation on risk management and internal controls for pension funds (including issues relating to outsourcing) will be reinforced. The supervisory authority in Australia expects to intensify its ongoing focus on risk management and governance by the trustees of superannuation funds. The authorities in Canada and Poland also expect to place greater emphasis on risk management and governance in the future, whilst the UK is specifically reviewing the governance of investment decisions by pension funds through the Investment Governance Group, set up as a result of a review of the Myners Principles for Institutional Investment Decision Making. The Italian supervisory authority (COVIP) asked pension funds to check and take appropriate measures as regard their compliance with the principle of diversification of investments.

Pension funds and other institutional investors may make a greater contribution to the stability of the financial system in future through greater shareholder activism.<sup>23</sup>

#### ➤ **Step up disclosure and communication**

The recent crisis and the related scandals may have severely tested the confidence in financial institutions in general. While pension funds are neither the source of nor a mechanism propagating the crisis, they are unlikely to escape the general decline in confidence in financial services. There is moreover some evidence of a decline in contributions to voluntary schemes. This highlights the importance of rebuilding confidence in pension systems – particularly when arrangements are voluntary – and the need to reduce and better communicate the risks and the exposure to “worst case” scenarios for those individuals financing retirement mainly through assets accumulated in DC pension plans.

In this context (table 3), many countries (e.g. Costa Rica, Kenya, Lithuania, Mexico, the UK, Turkey) have reported a step up in their communication strategies. For example, Turkish pension funds have been running a joint information campaign on TV, with the support of the regulator, to reemphasize the long-term benefits of pension savings. In Mexico, the pension supervisory authority, CONSAR, has led an intensive media campaign explaining the differences between a permanent loss and a mark-to-market drop. CONSAR have also been in contact with legislators in order to explain that the main concerns raised by politicians are of a transitory nature and that it may not be advisable to overact with stiff policy measures. The IOPS Principles highlight the need for supervisory authorities to act in a transparent manner. They state that the pension supervisory authorities should: *“provide and publish clear and accurate information for the pension industry and the general public on a regular basis – such as the financial situation of the pension fund industry and observations on major developments in the pension sector.”*

Disclosure requirements, to help individuals make efficient choices, have also been strengthened in some countries. For example, in Turkey and in Slovakia where new legislation requires Pension Fund Management Companies to provide more detailed information about participants rights, fund management and results. In Hungary the HFSA has introduced a new communication strategy, emphasising the importance of the disclosure of 10 year performance records, including

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<sup>23</sup> See OECD Principles of Corporate Governance  
[http://www.oecd.org/document/49/0,3343,en\\_2649\\_34813\\_31530865\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/49/0,3343,en_2649_34813_31530865_1_1_1_1,00.html)

an explanation of weak returns. The UK has significantly increased communications activity via a series of public statements to employers and trustees setting out their general position in relation to current market conditions. The IOPS Working Paper No.5 outlines international experience regarding providing information to members' of DC pension plans.<sup>24</sup> Communication with pension funds, trustees, sponsors and particularly with pension fund members will be helpful in reducing uncertainty and maintaining members' commitments and engagements with private saving for retirement.

➤ **Improve financial education**

The OECD Good Practices on Financial Education relating to Pensions highlight the role various stakeholders (including governments, plan sponsors, social partners, providers etc.) can play in achieving this goal.<sup>25</sup> For example, governments may institute national awareness campaigns to ensure that populations understand the nature of pension systems and the impact of potential reforms<sup>26</sup>.

Improving financial education may help in promoting income security at retirement. Adequate financial knowledge and awareness would permit people to recognise the long-term nature of saving for retirement, and the importance of keeping up contributions to pension plans to guarantee an adequate level of retirement income. Moreover, better understanding of the long-term nature of pensions may avoid materialising losses by selling in the downturn, and may increase the support for the stabilising function of pension funds' investment strategies. However these measures and the information provided need to be carefully crafted to avoid overly negative reactions in difficult financial times.

➤ **Don't over regulate**

Finally, governments and pension regulatory authorities should be encouraged not to over regulate in response to the current crisis. Financial sector regulation has a history of showing that short-term policy responses do not always strike the right balance between stability and growth, and can have unintended consequences over the long term.

The first OECD core principle of occupational pension regulations, "conditions for effective regulation and supervision" states that "*An adequate regulatory framework for private pensions should be enforced in a comprehensive, dynamic and flexible way (taking into account the complexity of the schemes) in order to ensure the protection of pensions plan members and beneficiaries, the soundness of pensions plans and funds and the stability of the economy as a whole. This framework should however not provide excessive burden on pensions markets, institutions, or employers*"<sup>27</sup>

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<sup>24</sup> <http://www.iopsweb.org/dataoecd/7/16/41269701.pdf>

<sup>25</sup> <http://www.oecd.org/dataoecd/4/21/40537843.pdf>

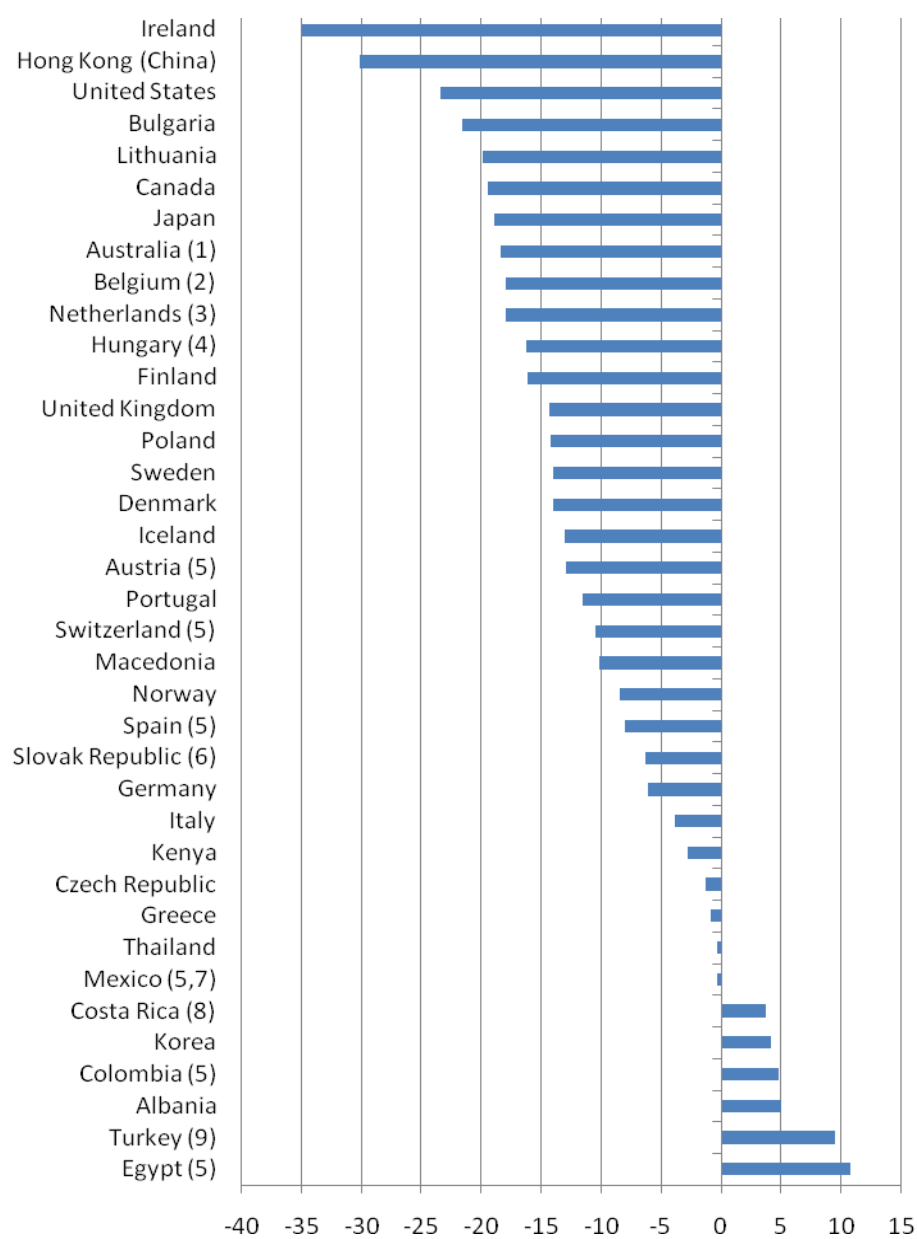
<sup>26</sup> See paper on "Private Pensions and Government Information Campaigns: Lessons from OECD countries" in <http://www.iopsweb.org/dataoecd/53/16/42349127.pdf>

<sup>27</sup> OECD (2004): *Recommendation on Core Principles of Occupational Pension Regulation*, 2004

Therefore, the regulatory framework should be robust and flexible. Robust in the sense that addresses the main concerns of members, in particular the protection of their benefits. However, it should be flexible to address funding problems as well as have flexible rules about the payout phase and around when to purchase an annuity. Governments should therefore resist introducing too many regulations in face of the crisis that may jeopardize flexibility. Finally, industry associations may also be able to play a role via responsible self-regulation.

## ANNEX

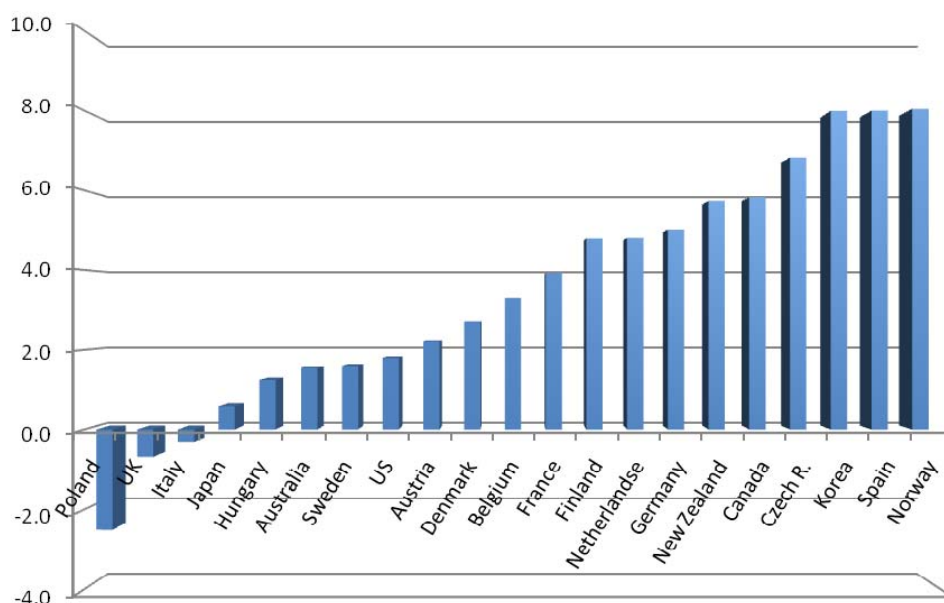
**Figure 4. Figure A1. Pension fund nominal returns in selected OECD and non-OECD countries, 2008**



Source: Official data for Austria, Belgium, Finland, Hungary, Ireland, Korea, Mexico, the Netherlands, Norway, Poland, Slovak Republic, Spain, Switzerland, Turkey, and all non-OECD countries. OECD estimates for other OECD countries

Notes: (1) Official data up to September 2008 then complemented by OECD estimate up to December; (2) Data are as of 30/09/2008 and refer to a sample of 60 DB pension funds, representing end 2007 78.63% of the market in terms of assets; (3) Data refer to DB plans only; (4) Data refer to mandatory pension plans. Average net nominal investment return was -7.22% in 2008 for voluntary pension plans; (5) Gross data; (6) Data refer to mandatory pension plans, while the average net nominal investment return was -1.93% in 2008 for voluntary pension plans; (7) Data refer to personal pension plans only; (8) Data refer to DC system only; and (9) Data refer to voluntary personal pension plans only.

**Figure 5. Figure A2. Increase in gross public pension expenditure (old-age pensions) as a share of GDP, 2000-50**

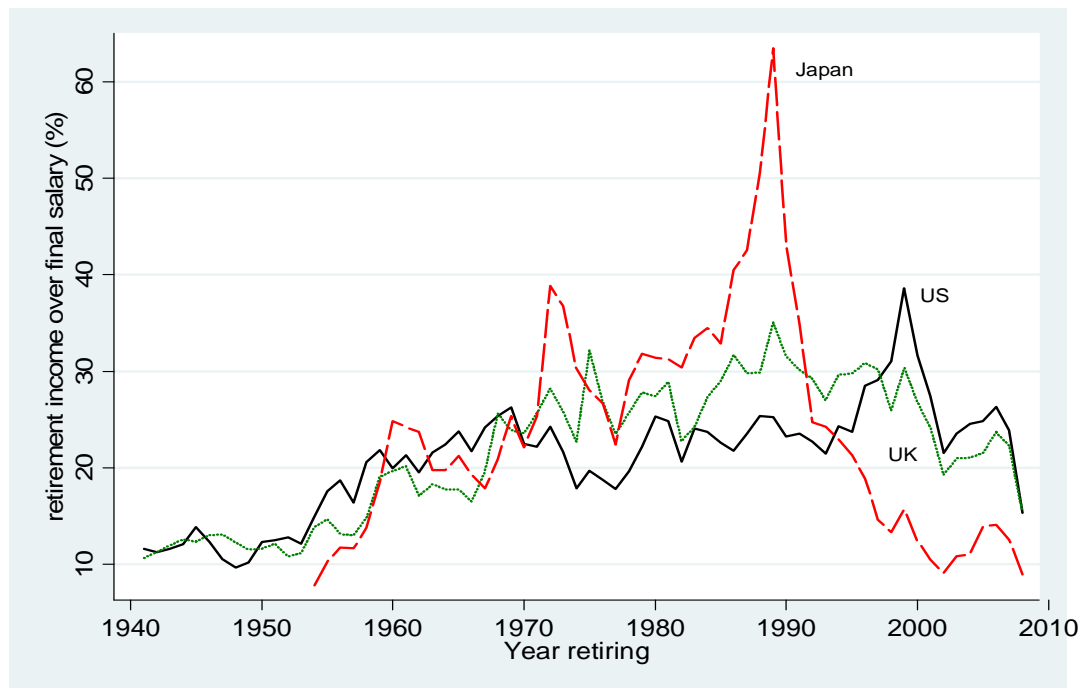


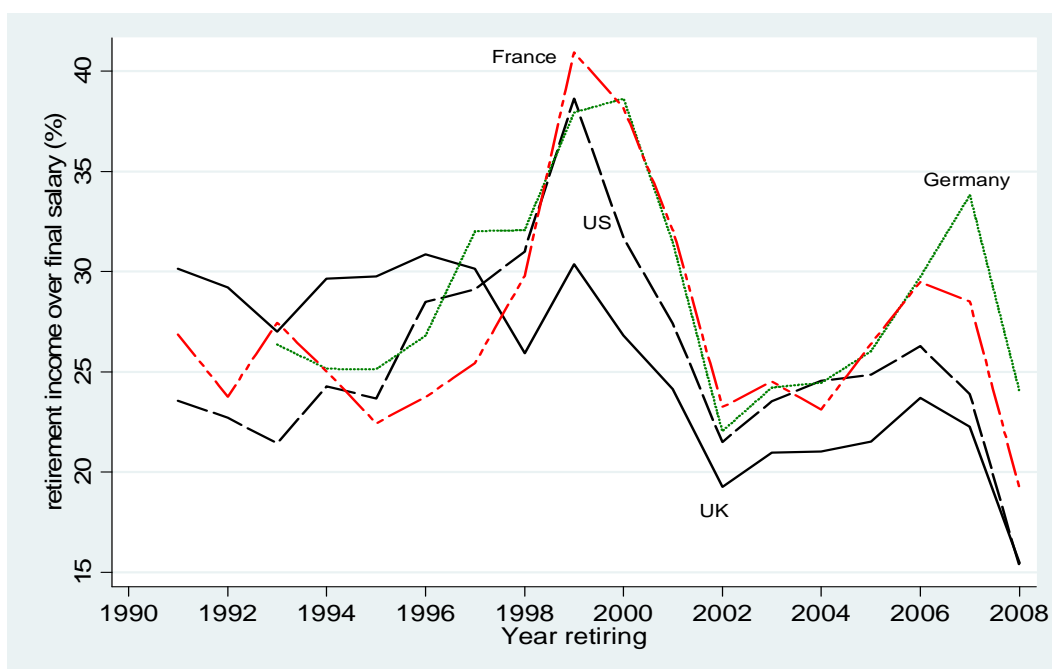
Source: OECD (2001) "Fiscal Implication of Ageing Populations".

Notes: Reforms to public pension systems implemented in the period from 2002 to 2007 (see Pension at a Glance, 2007), may have somewhat attenuated those increases in public pension expenditures as a share of GDP.

**Figure 6.**

Figure A3. Hypothetical replacement rates in DC pension plans, selected OECD countries





Source: OECD calculations

Notes: The impact of the timing of retirement on retirement income is measured by the ratio of retirement income to the last salary (*i.e.* replacement rate). The exercise assumes that individuals enter the workforce at age 25, works steadily for 40 years and retire at age 65. They contribute 5 percent of wages each year to a pension account investing 60% in equities and 40% in bonds. Additionally, the exercise assumes that wages growth 2 percent annually in real terms. It uses each country major equity index to measure returns on equities and the returns on long-term government bonds to measure returns on fixed income investments. Finally, in order to calculate replacement rates, the exercise assumes that at retirement individuals buy an annuity. The annuity payment is determined by the value of assets accumulated at retirement, life expectancy set at 20 years, and the long-term riskless interest rate prevailing at the time of retirement.

**Table 1.**

**Table A1. Selected regulatory responses to the crisis**

<b><i>Governmental Authority</i></b>	<b><i>Regulatory Responses</i></b>
Financial Market Authority, Austria	Currently several components of the Pensionskassen system are being discussed such as the valuation of corporate bonds, the method of calculation of guarantees and the technical parameters used for the forecast of pension payment.
Government, Australia	<p>Relief for pensioners: On 18 February 2009 the Government announced that it will suspend the minimum payment requirement for account-based pensions for the second half of 2008-09. This will be achieved through a 50 per cent reduction in the minimum payment amounts that would otherwise apply for the 2008-09 financial year. This change will benefit account-based pension holders to the extent that it avoids having to sell assets at a loss in order to meet the minimum payment amount for the current year. The reduction in the minimum payment amounts for 2008-09 will apply to account□based, allocated and market-linked pensions.</p> <p>Withdrawals from funds on hardship grounds: Superannuation funds invest a proportion of members' assets through managed investment schemes, which is a type of investment vehicle regulated by Australian Securities and Investments Commission (ASIC). Because of the impact of the freezing of managed investment schemes on some investors who require access to their funds, ASIC has allowed scheme operators to provide for hardship withdrawals, whether investors have invested directly, or indirectly through an intermediary, such as a superannuation fund. The circumstances for relief are limited to cases where investors are unable to meet reasonable and immediate family living expenses, where there are compassionate grounds for relief, including foreclosure or funeral expenses, or where investors need to meet medical costs for serious illness. The provisions can provide the member with a maximum of \$20,000, plus 50 per cent of the balance of their investment in the scheme.</p> <p>Tax relief: In December the Australian Government announced that it will provide optional capital gains tax roll-over for capital losses that are realised from pension fund mergers. This will assist funds seeking to merge with other funds.</p>
FSC, Bulgaria	Technical interest rate (set annually by regulator) reduced from 3% to 2.8% in order the reserves held by pension insurance companies will higher.
Canada (Provinces)	<i>Nova Scotia:</i> We will be introducing temporary solvency funding relief measures. Most likely this will be to increase the solvency funding period from 5 years to 10 years for any new solvency deficiency, and permit existing deficiencies to be consolidated and funded over 10 years as well.



	<p><i>Alberta:</i> Temporary funding relief measures have been introduced for multi-employer pension plans and single employer defined benefit pension plans. As well, as mentioned, there has been a heightened review of all defined benefit plans from a funding perspective and more conversations with plan sponsors, boards of trustees and advisory committees on the subject of plan funding.</p>
Superintendencia, Costa Rica	<p>We are changing some investment limits to eliminate restrictions and let the OPC to participate in the market based on their own risks limits and investigations.</p> <p>Our board is approving a regulation for corporate governance.</p> <p>In the DC system we initiated the measure of capital adequacy and operational risk. This regulation has associated the operational risk grade to additional capital requirements. In DB systems we are studying the model and in the short term we will have a similar regulation.</p>
Ministry of Social Affairs and Health, Finland	<p>The main issue over the last few months has been the relaxation of solvency regulations of pension providers administering the private-sector statutory earnings-related pension scheme. The government gave on the 17<sup>th</sup> of October 2008 to Parliament a bill for the strengthening of the employment pension funds of the earnings-related pension scheme in view of the decline in the equity market. The bill was approved on the 19<sup>th</sup> December and the act came into force on the 22<sup>nd</sup> December 2008. The act aims at securing the solvency requirements of the pension funds without leading to forced sells of equities in a disadvantageous market situation. The relative solvency requirement (solvency capital in relation to liabilities) depends on the risk level of the assets. There was a need to increase solvency margins and temporarily reduce the solvency requirements. Otherwise the pension insurers would have been at risk of selling their equity assets (at an unfavourable price) and invest in assets with less risk to lower their solvency border. These legal provisions are in force until the end of 2010.</p> <p>On the 24<sup>th</sup> February 2009 the government announced plans to raise the retirement age from 63 to 65 years. The decision was made at the cabinet's mid-term talks, which mapped out government policies for the next two years. The retirement age would be increased gradually (in two-month increments) over a period of 12 years beginning in 2011. This plan is mainly part of preparation to after-crisis era to ease ageing pressures for sustainability of pension system and labour markets.</p>
BaFin, Germany	<p>Following the introduction of the Finanzmarktstabilisierungsgesetz (Financial Market Stabilisation Act, FMStG) in autumn 2008, several changes have been made to the Versicherungsaufsichtsgesetz (Insurance Supervision Act, VAG) which also applies to Pensionskassen and Pensionsfonds. §83a of the VAG on the special deputy has been changed. The changes limit the liability of the</p>

	<p>special deputy in case of negligence. This change went into law on 18 October 2008. Further changes became effective on 01 January 2009.</p> <p>BaFin amended some scenarios of its stress test. Furthermore, BaFin is currently checking the investment limits.</p> <p>Additionally, a prolonged period of low interest rates could lead to a reduction of the maximum interest rate for calculating the technical provisions.</p>
Ministry Finance, Greece	<p>Actuarial and asset management control on the reserves of OPF and life insurance companies, is expected to be the core area for the corresponding supervisory authorities to promote the required regulatory and administrative changes, in order to achieve a more sophisticated, direct and efficient supervision in the near future.</p>
Department of Social and Family Affairs / Pensions Board Ireland	<p>Granting additional time allowed for the preparation of funding proposals, as a temporary measure; dealing as flexibly as possible with applications for approval of funding plans.</p> <p>In view of the ongoing difficulties in the investment markets, the Minister for Social and Family Affairs has asked the Pensions Board to implement a number of changes to the supervision of defined benefit schemes. They are as follows:</p> <p>The Board will allow longer periods for recovery plans (i.e., greater than ten years), in appropriate circumstances;</p> <p>The Board will allow the term of a replacement recovery plan to extend beyond the end date of the original plan where the scheme is part-way through a previous recovery plan but is off track due to investment losses;</p> <p>The Board will take into account voluntary employer guarantees in approving recovery plans;</p> <p>To ensure that these extensions are not seen as a weakening of supervision, the Board will reject recovery plans which fail to demonstrate an appropriate investment approach.</p> <p>The operation of these proposed changes will be reviewed by the Pension Board no later than 1st January 2011.</p> <p>The Minister for Finance announced that he is to provide an option for members of DC occupational pension schemes to defer the purchase of a retirement annuity with their pension funds for a specified two year period. Under current arrangements, members of DC occupational pension schemes, are, in general, obliged to purchase an annuity immediately upon retirement with their pension fund after taking their tax free lump sum. Under the deferral arrangement, members of DC occupational pension schemes who</p>

	retire in the period 4 December 2008 to 31 December 2010 will have the option of taking their tax free lump sum and defer the annuity purchase, subject to agreement with their scheme trustee, up to and including 31 December 2010 by which date the concession of an option will end.
COVIP, Italy	Easing of maximum liquidity limits to investment, conditioned to an assessment and a specific decision by the governing board of each fund.
FSC, Jamaica	<p>The FSC has proposed amendments to the legislation to assist small pension plans which may otherwise be wound up and to facilitate multi-employer pension plan which is expected to give sponsors the opportunity to pool funds and reduce administrative costs. The proposed amendments to the legislations also provides for private pension plans to be given preferred creditor status upon the winding-up of companies.</p> <p>Small pension plans find it more difficult to absorb the costs associated with administering their plans. The FSC intends to reduce the reporting requirements under Phase II of the Pension Reform of plans which satisfy the definition of being a small pension plan. This will reduce the administrative costs of these plans. Small plans represent 11% of the pension industry as at June 30, 2008.</p> <p>Industry stakeholders have expressed the view that the current registration requirements will deter the establishment of new pension plans. The FSC has proposed that the legislation be amended to allow registration of pension plans provided certain basic requirements are met.</p> <p>It is expected that the financial crisis will accelerate legislative amendments under Phase II of the Pension Reform which are designed to broaden and strengthen the legal framework for safeguarding pension rights and benefits. The proposed amendments include among other things, vesting, locking-in, portability and multi- employer plans.</p>
Ministry Labor, Korea	<p>A revision to the laws and regulations related to the reasonable solvency-verification procedure in DB plans is currently in progress. The revision will allow employers to contribute additional compensatory payment to pension funds when the funding level does not meet the necessary requirements.</p> <p>Investment regulations will be improved to raise the efficiency and stability of pension asset management,</p>
Securities Commission, Lithuania	<p>Contribution rate to pension funds was cut from 5,5 to 3 % of gross salary, but this was done due to the efforts by the government to balance state budget and revenues and expenditures by State-owned Social Insurance Fund.</p> <p>Draft laws are being prepared to reduce management fees of pension</p>

	<p>funds. Further need for improvement in regulation is being discussed (payout phase, other amendments).</p> <p>Investment restrictions will be reviewed. Asset pricing models will be reviewed. There are intentions to demand that pension fund and its depository should not belong to the same financial group.</p>
MAPAS, FYR Macedonia	<p>Legal changes in the investment regime allowing better diversification are currently in the Parliamentary procedure and expected to come in force in the near future.</p>
CONSAR, Mexico	<p>At the end of 2008, there was a small amendment to the Mexican pension law that reinforced the faculties held by CONSAR to supervise pension funds and to impose penalties due to investment regime violations, as well as the faculties granted to the board of CONSAR to establish regulatory and prudential investment rules.</p> <p>As a second important aspect contained in the aforementioned amendment, Congress established a ceiling to fees that pension funds can charge to workers (price cap for management of resources), with the goal of contributing to reduce the potential dent on income retirement caused by the crisis, as well as with the aim of increasing the solidarity of pension funds with workers (however, the ceiling is defined permanently in the law).</p> <p>Additionally, there is a legal reform proposal on redistribution of Federal Government's contributions to the individual retirement account (a pillar called social contribution or "<i>cuota social</i>"), raising it for low earners, so that the replacement rate of low income pension increases. In this bill, there is also the proposal to transfer to pension funds 80% of the contributions that currently are managed by the housing institute and that are destined to finance the housing benefits established by the social security law for all workers working in the formal sector. Under the bill, these resources could still be used to repay a housing credit; however, if they are not used for that purpose, they will be integrated into the pension balance (DC system), which in the latter case will raise the expected replacement rate. It is important to stress that these policies are at this time projects and have not yet been submitted to Congress for approval.</p>
Dutch Central Bank and Ministry of Social Affairs and Employment	<p>For DB pensions, the first supervisory response was to lengthen the period in which a recovery plan to get back to a funding level of 105% must be submitted to the supervisor. Instead of the usual two months after breaking through the minimum funding level, pension funds were allowed to submit their recovery plan by April 1st, 2009. This measure was taken with a view on a possible reduction of volatility, so that recovery plans would be more predictable again.</p> <p>When volatility remained high (especially on the equity market), the Minister of Social Affairs and Employment raised the recovery period (from three years) to five years to get back to the 105%</p>

	<p>funding level. This measure was taken to prevent (where possible) reductions of accrued benefits that in future could turn out to be unnecessary (because of a timely recovery of equity markets and interest rates).</p> <p>And finally, in the context of the Government's response to the crisis as a whole, it was recently decided that benefits will not effectively be reduced before the end of 2011, even if the pension fund considers this measure to be necessary in order to recover timely.</p> <p>For DC pensions, an alternative way to buy an annuity was introduced. Normally, retirees have to use their entire pension capital (from one provider) to buy a lifelong annuity. Since equity prices have decreased dramatically and the interest rate used by the calculation of the annuity is extremely low, new retirees would receive much lower benefits than they expected (more than 20% lower than would have been the case if they had retired one year earlier). Therefore, it was announced that retirees can temporarily cut their pension capital in two parts: (i) one part to buy an annuity for 5 years, and (ii) one part where the acquisition of an annuity can be deferred until directly after the first 5 year annuity. This measure was taken to allow new retirees to profit at least partially from the hoped-for recovery of equity markets and interest rates.</p>
Ministry of Finance, Norway	<p>Due to updated mortality statistics Norwegian pension funds have been subject to increased requirements as regards premium reserves. Initially they were given a period of three years by which they were expected to meet the new requirements. In light of their current financial situation this period has been extended to five years.</p> <p>The Norwegian FSA are considering possible amendments to the present legislation regarding inter alia the regulation on assignment of surplus and the use of provisions linked to contracts with guaranteed interest.</p>
Private Pension Supervisory Commission, Romania	<p>Making use of its statutory powers, the Romanian Private Pension Supervisory Commission has issued secondary legislation that allows for one year period all pension funds to invest up to 100 % of their assets in state bonds issued by Romania or the other EU member states; in the same time the fund administrators are exempt to respect the of minimum limits for securities set up in the pension scheme prospectus and the exposure on one bank is maximum 5% of fund assets.</p>
Ministry of Labour, Social Affairs and Family / National Bank, Slovak Republic	<p>In 2005 Slovakia has launched fully funded defined contribution (DC) scheme (the 2<sup>nd</sup> pillar). At the end of 2008 the Government has approved the amendment of the Act on the old-age pension saving system (No. 43/2004 Coll.) that has opened the 2<sup>nd</sup> pillar from November 15<sup>th</sup>, 2008 till June 30<sup>th</sup>, 2009. Primary aim of mentioned opening is to allow withdrawal from the second pillar for those contributors for whom participation in this system is not the</p>

	<p>optimum solution, mainly related to the impact of the world financial crisis upon the value of their savings (investments). During this transition period it is allowed also to join or to enter the multi-pillar system.</p> <p>New methods of comparing rates of return of investments (savings) are being prepared. We are also considering changes in the fees area in the 2<sup>nd</sup> pillar, which are currently indifferent from the funds performance. Mentioned fees should be linked to this performance to increase the motivation of pension funds management companies to invest with higher efficiency. Guaranties of means saved in the funds by contributors are also being reconsidered to bring the contributors more confidence.</p> <p>In the context of the 2<sup>nd</sup> pillar, some changes were introduced in the new secondary regulation about to be issued in about a month. These changes provide for administrative actions to be taken when certain type of financial instrument in the portfolio of pension fund suffers devaluation as a result of extraordinary situation on the market. Under the regulation currently in force there is not much flexibility for the pension manager to retain this instrument in the portfolio. Under the new regulation, instruments down-rated to the speculative grade or removed from trading on regulated market would be allowed to remain in the portfolio if this is in the best interest of the members and the devaluation was caused by unexpected changes on the financial market. However, such instruments would be allowed to be held in the portfolio only for a limited period of time upon the consultation with the regulator.</p>
Ministry of Finance, Spain	Studies on using “held-to-maturity investment” using expiry date values to value assets instead of mark to market have been undertaken.
Ministry of Finance, Swaziland	It may result in the RIRF revisiting the investment guidelines as set out in the regulations to review the requirements for more risky portfolios and consider reducing the recommended maximum that are stipulated in legislation. RIRF may also consider directing the retirement funds to increase the portion of assets invested in Swaziland.
Ministry of Finance, Sweden	In the early stages of the financial crisis the Swedish Government established a state guaranteed programme (20 October 2008) in order to secure the middle ranged bank and mortgage company borrowings. The purpose was to lower the loan costs of the households and the companies. In relation to this revision the Swedish Financial Supervisory Authority revised the directions of the calculation of the discounting rate. With the changes the rate could be determined with consideration to the average value of a wider range of securities (not only government bonds).
Securities and Exchange Commission, Thailand	Amend a number of investment rules applied to provident fund, e.g. foreign investment limit, restriction on securities lending transaction, investment in derivatives products etc. The amendments mainly aim

	<p>to give more protection to members of the provident funds.</p> <p>Report to the Ministry of Finance for consideration whether stop making contribution temporarily, for some periods is reasonable to be allowed. (Stop making contribution for some periods is not allowed by the provident fund law at present.)</p>
Treasury, Turkey	<p>A new regulation on the actuarial review of these funds is about to be issued. Moreover, a regulation was put into effect as of July 2008 regarding the tax-free transfers from the occupational pension plans and provident funds to the more transparent individual pension system.</p> <p>Allowing partial withdrawal of funds in case of financial hardship is being considered as a remedy to slowdown termination of contracts. Another suggestion being considered is to increase tax benefits to convince participants to continue to save.</p>
TPR, UK	<p>Flexibility already exists in the UK system and when the sponsor company is under pressure there is potential to renegotiate previously agreed recovery plans. The avoidance of fixed rules ensures that we are able to work within existing parameters to ensure that scheme funding levels and affordability for the employer are balanced,</p>

**Table A2. Supervisory responses to the crisis: Increased supervision**

<b>Supervisory Authority</b>	<b>Increased Supervisory Response</b>
Financial Markets Authority, Austria	The supervisory measures of the Austrian Financial Market Authority (FMA) were surveys concerning the investments of Pensionskassen in assets severally affected by the financial crisis such as AIG, Washington Mutual, Merrill Lynch, Lehman Brothers, Sigma, Madoff -Funds, Primeo-Funds and Herald-Funds.
APRA Australia	Increased monitoring of liquidity of DC funds  Increased monitoring of funding position of DB funds
FSC, Bulgaria	In relation with the financial crisis a financial stability task force was established within the Bulgarian FSC in 2007. The activities of the task force include: <ul style="list-style-type: none"> <li>• Permanent monitoring and regular assessment of the situation and the development of the pension fund sector in order to identify any potential risks and crisis situations which can endanger the stability of the financial system;</li> <li>• Analysis and assessment of the macro economical situation in the country, the development trends of the international financial markets and the impact of the regulatory measures within the EU for the maintaining the stability of the Bulgarian financial system;</li> <li>• Development of a system of indicators for financial crisis (early-warning system).</li> </ul>
Superintendent Pensions, Nova Scotia, Canada	More in-depth reviews of DB plans, including funding ratio estimates;  Proactive contact with vast majority of plans to discuss situation;  Funds which were taking contribution holidays have been instructed to start contributions unless they can prove they still have excess assets.
CAPSA Canada	From 2007 annual valuations required for plans less than 90% funded.  Plans where a contribution holiday was granted must submit a cost certificate
Superintendencia, Chile	Monitoring has been stepped up with more contact with investment managers and custodians and increased reporting demands from Pension Fund Managers. Coordination with other financial supervisors has also



	increased.
Superintendencia, Columbia	Given that the bigger impact of the crisis has been reflected in the devaluation of the investments, from the point of view of the supervisor, a special effort has been made in order to evaluate those investments to prevent manipulations that may hide effective losses.
Superintendencia, Cost Rica	DB funds are being asked to investigate the impact on their projected data and the action they are going to take to face the crisis.
BaFin, Germany	<p>BaFin decided to install an internal Task Force for its insurance and pension funds section. The Task Force is dedicated to collect early warnings as well as data on different kinds of risks and to transform the results into concrete supervisory measures. The TF is responsible for designing data requests as well as other more qualitative requests from a sample of the largest German insurers and Pensionsfonds (market coverage of the IORPs included in the sample measured as percentage of total investment: Pensionsfonds 83.1% and Pensionskassen 60.8%). The requested insurers and Pensionsfonds must report on a weekly basis on their liquidity, the (group-) solvency margin, the assets covering technical provisions and any other risk that may influence the insurance group/entity.</p> <p>In addition, ad hoc requests are carried out on a weekly basis and complement BaFin's regular reporting requests. Issues depend on current developments on the international financial markets. Issues covered so far include a variety of risks, for example, equity, ABS and bank exposure. The Task Force evaluates the received data and makes a supervisory assessment of it. Important results of the requests are passed on to the Federal Ministry of Finance twice a week.</p>
HFSA, Hungary	With the need to strengthen governance, accountability and risk management of pension schemes, the Authority aggravated its supervision of the funds paying increased attention to their investment processes, frequently reporting to the Ministry of Finance on portfolios from mandatory funds and submitting suggestions on the modification of the current regulations.
COVIP, Italy	<p>Special meetings with selected pension funds and pension fund managers have been held in order to assess the impact of the crisis and the measures taken or envisaged by funds regarding tactical asset management, strategic asset allocation, and scheme design. Surveys on exposure to specific issuers (Lehman, Madoff) have been conducted.</p> <p>All pension funds have been requested to carefully check the compliance with the principle of diversification of investments, and report to COVIP of actions taken or envisaged after the check (if any).</p>
FSC, Jamaica	Pension plans which had a funding deficit or whose funding ratio was marginally above or below 100% as at registration have been red-flagged for close monitoring.

Kenya	<p>RBA has taken a more vigorous posture in licensing of service providers. Due diligence meetings with service providers will be a continuous process opposed to the end of the financial period. Consequently, reporting required by funds to supervisors has also been intensified</p> <p>RBA has adopted a more proactive approach to the regulation of the pension sector through the adoption of risk based supervision. This promotes early identification of vulnerabilities and improved monitoring of risks.</p>
Securities Commission, Lithuania	<p>Monitoring activities were stepped up. Regulators gave more efforts to monitor transactions by pension funds, do more research on the holdings of pension funds, publicise relevant information. More attention was drawn to asset allocation, regional distribution of investments – e.g. if there are investments in certain regions (e.g. Russia) or issuers (e.g. Lehman Brothers, Madoff), indirect investment policies when pension funds gain access to some markets via investment funds. New IT system of reporting and information gathering was launched as of January 1<sup>st</sup> 2009, so more accurate and timely information has become available for supervisory purposes. In addition pension fund returns were tracked closely, study on net returns was carried out, results were compared to appropriate benchmarks and conclusions were drawn.</p>
CONSAR, Mexico	<p>At the end of 2008, there was a small amendment to the Mexican pension law that reinforced the faculties held by CONSAR to supervise pension funds and to impose penalties due to investment regime violations, as well as the faculties granted to the board of CONSAR to establish regulatory and prudential investment rules.</p>
FSA Norway	<p>The Norwegian FSA has carried out a close surveillance of individual insurance companies and pension funds in 2008.</p> <p>Additional surveys on investment risk – After the collapse of the Lehman Brothers all life insurance companies and the largest non-life insurance companies and pension funds were asked to report gross exposures to foreign financial institutions by the end of September 2008. The companies were also asked to report possible expected losses on these exposures. The purpose for this mapping was to get an idea of how many and which companies that would suffer should another major foreign financial institution go into bankruptcy.</p> <p>Increased frequency of reporting – All pension funds (approx. 120) were asked to report their latest performed stress tests by the end of September 2008. They were also asked to give a short evaluation of their financial position. The survey revealed that several pension funds were in the immediate risk of not fulfilling the capital requirements. Several actions have been taken by the Norwegian FSA towards the pension funds due to their financial situation.</p>
Financial Supervision Authority, Poland	<p>In the course of crisis the Polish FSA has examined carefully the composition of pension funds portfolios in order to determine if they do not contain “toxic assets” which could lose their value and impact</p>

	negatively the investment performance.
ISP, Portugal	Due to the crisis, ISP has stepped up the monitoring activity, namely by increasing the frequency and depth of the pension fund assets supervision, specifically on the scenario and stress analysis of the market asset value in order to anticipate future developments and act in a preventive manner.
Private Pension Supervisory Commission, Romania	<p>Romanian Private Pension Supervisory Commission has been paying close attention to all matters related to the stability of the pension system and most importantly to the investments of the pension funds. During this period, activity is focused on monitoring fund administrators activity (they are part of international financial groups), the evolution of private pension funds assets and structure of funds portfolio.</p> <p>In the near future, Supervisory Commission will continue to monitor of the activity of the fund administrators, mainly the investment activity as prudential requirements/return on investment and will implement supervision procedures and techniques in line with international experience and CEIOPS and IOPS recommendations.</p>
National Bank, Slovak Republic	Since September 2008, our off-site supervision department has been even more closely observing portfolios of pension funds and their exposures to risky companies such as Merrill Lynch, Goldman Sachs, Madoff etc. Due to the financial crisis the standard set of stress scenarios has been supplemented by new scenarios taking into consideration current market volatility.
Ministry of Finance, Spain	<p>The monitoring activity has been strengthened by “on site inspection” and “off- site inspection” (analysis of qualitative restrictions, valuation of assets, dispersion and diversification limits, risk management...)</p> <p>Funds affected by bankruptcies and financial scandals such as Lehman, Madoff, AIG... have been closely monitored.</p> <p>Losses arisen from different types of credit derivatives (CLO, CLN, CDO...) have been analysed.</p> <p>Additional surveys have been sent to entities asking for composition of investment portfolio of the pension funds, demanding additional detailed information about positions held in assets affected by financial scandals such as Lehman Brothers or Madoff in order to assess the impact of their positions in this kind of products.</p> <p>An analysis of the diversification and dispersion limits fixed in the law has been undertaken, demanding a recomposition of the portfolio in cases that limits had been exceeded. Specifically we had some cases associated with bank deposits and cash that were in banks that belong to the consolidated group.</p> <p>New accountant and statistical models have been approved. In these new models, the portfolio information has been developed, so that supervisors get information about every asset that belongs to pension plan portfolio.</p>

	<p>Besides, the periodicity of surveys has been increased.</p> <p>The number of inspections on investment portfolios of pension funds has been soared. These inspections are focussed on assessing the suitability of valuation methods of structured products, not negotiated assets, and free investments.</p>
Financial Supervisory Authority, Sweden	<p>In the light of this situation the monitoring activities have been strongly reinforced by the Swedish Financial Supervisory Authority (FI). This has been accomplished in a number of ways. For example the authority is more frequently carrying out analyses of solvency rates. It has been done mostly for internal use in order to determine whether any specific action needs to be taken vis-à-vis a particular company.</p>
Securities and Exchange Commission, Thailand	<p>As a provident fund registrar and a capital market regulator, The Securities and Exchange Commission, Thailand is aware of the existing situation and has stepped up monitoring activities in many ways.</p> <ul style="list-style-type: none"> <li>• Monitoring off-shore investment in terms of amount and type of financial instruments to prevent the adverse effects of the current international financial situation.</li> <li>• Monitoring financial status of issuers such as bond and stock issuers to limit investment risk.</li> </ul> <p>Closely coordinate with the association of investment management companies to keep monitoring the situation of employers who are having financial difficulty due to the economic downturn and cannot pay contribution into the funds temporarily or want to stop running the funds.</p>
Treasury, Turkey	<p>Monitoring activity has been tightened for the whole sector, but not for particular funds. Detailed surveillance reports have been delivered to upper management more frequently since September 2008.</p>

**Table A3. Supervisory responses to the crisis: Increased communication and disclosure**

<i>Supervisory Authority</i>	<i>Increased Communication and Disclosure</i>
Superintendencia, Chile	They have been working at approaches to convey a message for participants, public opinion and governmental authorities that retirement savings are for the long run and that short term volatility is possible in the system.
Superintendencia, Costa Rica	Our board is approving a regulation for corporate governance and explaining people a pension is a long term product, so it is important to analyze the performance in the long run instead of the short run.
HFSA, Hungary	<p>HFSA is emphasizes the importance of the right communication flow towards pension fund members in establishing an appropriate risk tolerance philosophy and in improving their understanding of the impact of key investment and solvency related decisions upon the financial condition and performance of the funds. One of the main focuses of the HFSA in regard to communicating with the funds and the fund members is ensuring the disclosure, thus the availability of all adequate information.</p> <p>Keeping in mind the emergency created by the global financial crisis, HFSA introduced a new communication strategy emphasizing the importance of the disclosure of the past 10 years' investment performance respectively the explanation of weak returns when disclosing them. This need is also generated by the poor communication flow between funds and members including inadequate information from the funds for the members about their choices to ease the losses, as well as the weak financial literacy among members.</p>
COVIP, Italy	COVIP asked all funds to remind to retiring members that the current legislation already allows them to keep their capital invested in the pension fund after retirement, making it possible to wait for an improvement of market conditions before buying an annuity.
FSC Jamaica	Supervised funds and industry participants, through the Pension Funds Association of Jamaica, have suggested a collaborative effort with respect to educating the public about the importance of pension plans as a vehicle for saving towards retirement despite the current financial crisis. It is hoped that this on-going activity will attract new members to retirement schemes and deter employers from winding up their pension plans. Additionally, the crisis has highlighted the need for financial education geared at saving for the long term by plan members and the general public.
Kenya	Collaboration with other supervisory authorities has been intensified. The Authority is working more closely with Central Bank, Insurance Regulatory Authority, Capital Markets Authority with and the Ministry of Finance. The Authority is working with industry to prevent pro-cyclical behaviour and encourage pension funds to act in line with the long-term nature of their commitments;

	RBA has developed intensive financial education and communication strategies
Securities Commission Lithuania	The issue of investor education became more crucial – to explain that pension accumulation is a long term product, that sudden and inappropriate actions could cause more harm (switching pension fund and realizing losses). Besides, policy makers reacted to the concerns of people and initiated amendments to laws; regulators had to respond to the new proposals and to try to keep the pension system stable
MAPAS, FYR Macedonia	MAPAS provides (via public media) explanation about the situation and the effects to the members of the pension funds informing them about current effects of the crises and the long term perspectives and nature of the pension system.
Ministry Labor, Social Affairs and Family/ National Bank, Slovak Republic	Legislative changes effective from January 1 <sup>st</sup> , 2009 bring more awareness for people about activities of Pension Funds Management Companies, which are given an obligation to provide more detailed information about results of activities and of managing particular funds. In the respect of latest development in financial market the investment portfolios of the funds were reviewed and the limits of investing in financial instruments with higher risk level were reappraised. The regulation of fees and guaranties of funds is being discussed.
FSC Thailand	Educate fund members in order to help them understand investment concepts such as risk-return tradeoffs, diversification, and long-term investment to reduce panic due to disappointing investment return.
TPR UK	<p>TPR has significantly increased communications activity to ensure employers and trustees understand how the system can operate in the light of these new challenges. An initial statement was made in October 2008. This was followed by one in December published with a detailed analysis of all the recovery plans received in the past 2 years. A further communication was published in February, specifically targeted at employers, and distributed directly and via industry organisations. Thus reiterated the priority of pension schemes over dividend payment.</p> <p>We have issued a public statement to trustees of all work-based pension schemes setting out our general position in relation to current market conditions. Our message highlights the fact that trustees need to remain vigilant and to keep the position of their schemes under review. The funding framework in the UK and the regulator's current codes and guidance cover the relevant issues and allow sufficient flexibility for trustees.</p> <p>We have advised members of DC schemes that they may elect for a more active role in reviewing their pension fund in the light of their current circumstances to decide whether they need to make any changes to the fund in which they invest, their level of contributions or their target retirement date.</p>

	<p>We followed this initial statement to trustees with a statement to employers sponsoring DB pension schemes. We set out how we would continue to apply the flexibilities in the scheme funding system pragmatically, looking for outcomes in the best interests of the scheme and sponsor but noting that all unsecured creditors must be treated equitably and the pension scheme not disadvantaged. A pension scheme recovery plan should not suffer, for example, in order to enable companies to continue paying dividends to shareholders.</p> <p>We continue to highlight that it is essential that trustees do not over-react in the face of the downturn, but should ensure they are active and alert to potential changes in the health of the sponsor, and to the funding level of the scheme. Where valuations show a larger deficit this may result in longer recovery plans being proposed.</p> <p>We are working closely with other ministries and regulators to monitor the impact of the crisis at a case and macroeconomic level and to ensure adequate focus on emerging risks.</p>
Treasury Turkey	<ul style="list-style-type: none"> <li>• Companies have been asked in early 2008 to send their plans on how to inform participants about market volatility. This has created higher awareness of the issues and led the companies to take actions in two ways: 1) advice participant about their rights to change asset allocation, 2) advice less volatile funds to new entrants.</li> <li>• A new legislation on further improvement of disclosure and information sharing practices of pension companies has been put into effect in August 9, 2008. These changes helped the participants to make better informed decisions.</li> <li>• An information campaign on television has been initiated at the beginning of 2009 to reemphasize the long term benefits of pension savings.</li> </ul>