Financial Stability Report 2011
First half-year report
Introduction

EIOPA’s Financial Stability Committee (FSC) has updated its report on the financial stability of the insurance and occupational pension fund sectors in the EU/EEA. The report is scheduled for the ESRB General Board and for the EFC Financial Stability Table discussions on the macro-financial conditions and overall stability of the EU financial system at meetings in June and July 2011. The current report covers developments in the insurance, reinsurance and occupational pension fund markets as of April 2011.

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1. **Summary of main issues and conclusions**

Sovereign risk is currently the main source of concern for the financial stability of the European Insurance and Occupational Pension Sectors. The process towards sustainable debt levels for sovereigns, both in Europe and globally, will determine whether, and to which extent, these risks will materialise to adversely impact the financial situation of the sectors. EIOPA considers that the risks described in CEIOPS’ second half-yearly report 2010 have not changed significantly, and that risks remain at high levels. The financial positions of the insurance and occupational pension funds have, however, improved slightly during the period under review, and the sectors have therefore built-up additional loss absorbing capacity.

**Insurance sector**

In 2010, the European insurance business largely recovered from the financial market crisis. **Premiums** have started to increase again, however at a slower pace in life than in non-life business, while **profits** tended to be higher, albeit at a still modest level. The **combined ratio** of premiums over claims and operating expenses (all net) came down slightly, and the recovery of asset values helped to improve the solvency positions of insurance undertakings. As such, insurance undertakings’ **solvency margins** have again built up shock absorption capacity for future stress events.

Following up on last report’s risk perception, EIOPA has analysed the sector’s resilience to a possible, even if apparently less likely, longer-lasting low interest rate environment, towards which vigilance is warranted as it would affect the sectors ability to finance guaranteed returns. Overall, EIOPA believes that the sector is well suited to cope with these challenges, albeit at varying degrees. EIOPA has assessed the sector’s exposure to **sovereign risk** with general reassuring, albeit diverging results.

A year of significant natural catastrophes, 2010 left the reinsurance industry with above average loss claims; however, the industry was still able to restore its balance sheets and accumulate capital. Despite a continuing trend of natural catastrophes in the first quarter of 2011, with two devastating earthquakes in New Zealand and Japan, there is still abundant reinsurance capacity which is meeting hesitant demand. The insurance industry as a whole faces several risks and challenges going forward, most of which are seen as still increasing. The prevalent ones are financial risks, in particular the risk of a longer period of low interest rates\(^1\) and the risks related to a downward correction in equity markets. A rapid increase in interest rates from their low levels may also be destabilizing for life insurers. A prolonged period of economic recession would be particularly challenging for the underwriting performance. It is also acknowledged that the implementation of Solvency II will be an important medium-term challenge for the industry.

**Pension Funds sector**

Concentrated in importance in only a few Member States, the Sector of **Institutions for Occupational Retirement Provisions (IORPs)** is growing at a

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\(^1\) Some financial market participants have seen the 7 April increase in the ECB benchmark rate by 25bp as a signal of additional interest rate increases in the near term. Other market observers have expressed the view that current inflationary pressures are temporary and supply driven, and that economic growth will be subdued for a longer period of time.
fast pace. There is a trend towards the area of defined contribution schemes, which leave sponsors less vulnerable to market downturns.

Preliminary data for 2010 provided by supervisors on a best effort basis, show that the recovery in the financial markets in the last two years has had a significant positive effect on the funding positions of IORPs, although they have not yet reached the levels of 2007 in some countries. While funding levels have improved, there still exists a great deal of uncertainty in the financial markets and the current low interest rate environment also creates differing problems in the Defined Benefit (DB) and Defined Contribution (DC) sector. The impact of the financial turmoil on the European occupational pension system had not been as severe as seen in other financial sectors, as the long-term nature of the liabilities affords some protection in this respect, and IORPs had not experienced the liquidity problems seen elsewhere. However the crisis hit pension funds primarily in their role as institutional investors and had a significant impact on consumer confidence.

The funding ratios of the DB occupational pension fund sector are improving, but remain below the levels observed in 2007. In many countries the funding conditions were strengthened quite substantially thus not requiring the need of substantial increases in contributions or to cut benefits. In others, some pension funds needed to increase the capital/contributions required from sponsors or to extend funding periods taking account of the underlying economic conditions. The financial turmoil directly affected the portfolio of DC members, with the greatest impact being on those close to retirement and/or heavily invested in equities. However, almost all DC systems are relatively young, so the numbers of older workers affected is small in absolute as well as in relative (to DB schemes) terms. For those further from retirement age, there is the potential for markets to recover and the recovery of equity markets in the last year has partially offset the losses experienced previously.

In response to the crisis, supervisory authorities focused on the flexibilities within the current framework facilitated by the IORP Directive and the different security mechanisms available. No major changes in the supervisory approaches have been reported or are expected. However some EU governments have started to consider how to improve the management of IORPs and to reduce risks affecting members. In DC systems, a careful plan design, such as suitable default and life-cycle options, and the promotion of financial education initiatives are increasingly considered to be crucial in order to empower people to minimise effects of financial downturns as well as being able to make sensible and informed choices regarding their pension provisions in the future.

2. Recent Developments

FINANCIAL MARKET DEVELOPMENTS

In the aftermath of the financial crisis, several economic and financial market indicators have shown positive signs over the course of the last year. Stock price indices were on the rise, corporate bond spreads have converged and economic growth has exceeded expectations in some European countries. However, at the same time, the issue of sustainability of government finances has come to the forefront of market concerns. For several countries, government bond yields have increased since the spring of 2010 (Figure 1). Although interventions by European authorities have succeeded in calming markets on several occasions, this increase has since been persistent.
The market turbulence in Autumn 2008 initiated another episode in the long-running trend of falling long-term interest rates. Risk-free rates continued to decrease well into 2010. However, after hitting a low point in August of that year, an indicative rebound has been visible over the last few months (Figure 2). This development is positive news for life insurers and pension funds. These institutions typically have long-run obligations to policyholders and pensioners that become more expensive in today’s terms when interest rates are low. Therefore, the financial position of these institutions typically suffers under these circumstances, in particular where the duration of assets and liabilities is not (fully) matched. For life insurers, this problem can be compounded if guaranteed minimal rates of return have been offered to policyholders. A too rapid increase in interest rates may also destabilize some life insurers as their contracts may become uncompetitive as compared to government bonds and clients would massively withdraw their funds.

Source: Datastream
During the last months of 2010 and early 2011, the rebound in stock prices continued. Worldwide stock indices have gained substantial traction, driven by the ongoing recovery in the US and strong economic growth in several emerging markets, despite recent concerns among some market observers regarding the sustainability of the fiscal situation in the US. These indices are now back at levels last seen at the beginning of 2008. European stock indices, by contrast, are still substantially below these levels, reflecting the ongoing sovereign crisis in the Eurozone. However, after remaining at unchanged levels for most of 2010, improvements have been observed recently (Figure 3). Pension funds and insurance companies hold sizeable equity portfolios and as such benefit from this increase.

Source: Datastream
In line with general market sentiment, share prices of listed insurance undertakings also increased over the last few months. Life insurers benefited in particular (Figure 4). This rebound could be ascribed to their above-average sensitivity to stock market developments following from their equity portfolio holdings. Furthermore, their operating environment has improved by virtue of rising risk-free rates. A further rationale behind the cyclical movement of life insurers’ share prices is that their business is more cyclical in nature compared to for example the reinsurance sector. While European reinsurers also took a hit during the crisis, their stock prices have generally outperformed broad indices like the DJ Euro Stoxx index and have by now fully rebounded to pre-2008 prices.

Figure 4: EU stock market indices

Source: Datastream

The financial strength ratings of European insurers experienced more downgrades than upgrades in 2008 and 2009 (Figure 5). Since the end of 2009, however, the rating outlook for large insurers has been improving. The number of insurers on negative outlook has sharply decreased and more insurers have been assigned a positive outlook (Figure 6).

This suggests that ratings analysts see an improvement in the solidity of the sector. As of April 2011, the outlook for large EU insurers is balanced: an equal number of institutions are on negative and positive outlook.
Figure 5: Development of leading European insurance groups’ financial strength: Credit ratings distribution (Year-end 2008, 2009, 2010 and current)

Source: Standard & Poor’s
The sharp widening of Credit Default Swap (CDS) spreads for European insurance groups during the market turbulence of 2008 and the start of 2009 reflected concerns about the sustainability of the global financial system. Since March 2009 onwards credit spreads have come down substantially in light of the more favourable developments for the sample of large European insurance groups in recent months (see Figure 7 and Figure 8). However, since the turmoil in sovereign debt markets CDS spreads have increased and have stayed consistently higher for several institutions.²

² CDS spreads are averages of price quotes from leading CDS market makers. The CDS quotes show trading intentions and it is not necessarily the case that deals are actually struck at the used quotations. As with all OTC derivatives, these spreads can be driven by illiquidity.
**LEGISLATIVE AND REGULATORY DEVELOPMENTS**

A number of legislative and regulatory developments have been reported by Member States. These were either launched during 2010, and the first part of 2011, or before with the effects of these initiatives being observed now.

Some countries have seen structural changes and developments in 2009, 2010, and during the first months of 2011, for example, relating to the establishment of single and fully integrated supervisory authorities, replacing and regrouping the previous existing financial supervisory structures. Such developments are, for example, observed in IE, BE, LT, FR.
Also, some reforms of insurance acts were adopted, or are still under way, in several countries. Amendments and new provisions were addressed in particular to the Insurance Business Act (SE, CZ and PL), to the pension funds regulation (MT and FR) and to the Financial Market Supervision (PL). In some countries the adoption of a new insurance act has been accompanied by the implementation of new reinsurance directives (CZ, IS).

Finally, according to the decision by the Court of Justice of the European Union from 1 March 2011, taking the gender of the insured individual into account as a risk factor in insurance contracts constitutes discrimination. The rule of unisex premiums and benefits will apply with effect from 21 December 2012. This decision has a considerable impact on the European insurers as well as pension funds and health insurance, because premiums and benefits are calculated based on the gender of the beneficiaries. Companies will be forced to introduce new tariffs.

Additional detailed information on legislative initiatives for the European Insurance and Occupational Pension Sectors are provided in Annex 2.

3. Developments in the European insurance sector

The following analysis of developments in the European insurance sector is based on 2009 data for each Member State and 2010 data for large and important insurance groups and on the qualitative reports provided by CEIOPS Members in 2010. Not all Member States provided a response and the reporting Member States may be different or the reporting basis may have changed from previous years. In those parts the analysis is incomplete.

DEVELOPMENTS IN 2010 AND OUTLOOK

The European insurance business as represented by the companies analysed in this report has largely recovered from the financial crisis of 2008/09. EIOPA’s fast-track reporting, which collects information of large insurance groups on a worldwide consolidated level for the financial year 2010, indicates improvements in profitability and solvency levels.

Premiums have risen by 2% on average (see Figure 9), with non-life insurance premiums growing stronger than life insurance premiums (4% vs. 1%). Within the non-life business the highest increases in premiums have been seen in marine/aviation/transport as well as in fire insurance, while in the life business, premium growth was highest in unit-linked products.
Overall profits of surveyed groups increased by 19% from 2009 to 2010 (see Figure 10). Given large increases in equity of insurance groups, the ROE grew only slightly (7.4% after 7.0% in 2009), while ROA increased to 0.6%.

The incremental increase in ROE does, however, not mirror the situation seen in a majority of insurance groups in which ROE increased much stronger.
er: The distribution shown in Figure 11 reveals a broad-based improvement in profitability. This is due to the fact that smaller groups tended to have a higher ROE both in 2009 and 2010: While the weighted average of the ROE in 2010 was 7.4%, the median was 10.1%, and 75% of participating groups had a ROE greater than 7.6%.

Figure 11: Distribution of returns on equity (life and non-life, in %)

Source: EIOPA, based on worldwide-consolidated financial information received from a sample of 26 large European insurance groups from AT, DE, ES, FR, IT, NL, SE and UK.

An improvement was observed in the profitability of non-life business: While premiums and claims increased, net operating expenses were quite stable. Overall, the combined ratio stayed more or less unchanged at 94%. Also this trend was observed for a majority of surveyed groups.

Figure 12: Profitability (life and non-life, in million EUR and %)

Source: EIOPA, based on worldwide-consolidated financial information received from a sample of 19 large European insurance groups from AT, DE, ES, FR, IT, NL, SE and UK.
Figure 13: Combined ratios (non-life, in %)

On average the solvency positions improved and the solvency ratio increased from 198% in 2009 to 206% in 2010.

Figure 14: Insurers Solvency Positions

Source: EIOPA, based on worldwide-consolidated financial information received from a sample of 19 large European insurance groups from AT, DE, ES, FR, IT, NL, SE and UK.
Low-yield interest rate environment

For the sector in general, when the duration of liabilities exceeds that of assets, a period of low interest rates creates asset-liability management challenges as return assumptions are harder to match with current investments in financial assets. Also, where insurers have provided explicit return guarantees or embedded options to policyholders, similar asset-liability management challenges emerge.

A prolonged period of low interest rates would tend to depress investment returns, while guaranteed rates could potentially still be relatively high. This applies in particular to Member States where minimum guarantees are set at the inception of the policy until expiry, and where the duration of liabilities cannot be fully matched with long-term assets. In January 2011, EIOPA collected quantitative and qualitative information from its Members\(^3\) regarding life insurance portfolios that offer interest rate guarantees. It appears from this survey that such contracts overall are not yet at risk of a shortfall. However, a sustained period of low interest rates could pose problems of servicing guaranteed rates, especially for those countries where there is less flexibility in adjusting guaranteed rates in view of financial market developments. This also implies that in some countries insurers have to pay out bonuses above guaranteed returns in order to stay competitive.

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\(^3\) So far data was received from 20 Members (AT, BE, BG, DE, ES, FI, FR, GR, HU, IE, IT, LT, LV, MT, NL, NO, PT, SE, SI and SK). In most cases the data covers a sufficiently long historical period from 2005-2009.
On average, investment returns on assets covering guaranteed rate contracts are sufficient to service the guaranteed rates provided. However, for some countries the period 2008 was particularly challenging given the overall depressed financial markets. Since then investment returns have picked up again, and are on average above the 10-year government bond yield.

Another way of differentiating between degrees of exposure to guaranteed rates is by looking at the distribution of contracts across different guaranteed rate buckets. Again, on average it appears that the share of contracts guaranteed at rates below 3% have steadily increased between 2005-2009 (from 44% of technical provisions in 2005 to 66% in 2009), while the share of contracts at higher rates has diminished. This positive trend is confirmed in all countries reporting data, with the exception of FI, MT and SE where the allocation of contracts into rate buckets has remained more or less stable throughout 2005-2009. The data also indicates that between 2007-2009 the bulk of countries had contracts with guaranteed rates below 4.5% (of which mostly below 3%). No country reported guaranteed rates above 6% during the 2005-2009 period.
Figure 17: Distribution of guaranteed rate contracts 2005-2009

Source: EIOPA

Supervisory Risk Assessment for the insurance sector

EIOPA Members and Observers have been asked to assess risks and challenges according to the probability of a materialisation and the impact on the national insurance markets. While for the Autumn EIOPA Financial Stability Report a more comprehensive list of 45 risks and challenges is used as the basis for the risk assessment, many of them being of a structural nature, the list used in the Spring Report is primarily focussed on market and credit risks.

Based on the responses from 27 Member States⁴, the following risks and challenges are classified as the most imminent, ranked by the product of the scores for probability and potential impact (see Table 1).

Sovereign risk, credit risk of corporate and private households as well as equity risk are the risks with highest overall rankings. Especially the first of these items is considered to have an increased probability of materialisation and also the impact of such a scenario is expected to be significant.

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⁴ AT, BE, BG, CY, CZ, DE, EE, ES, FI, FR, HU, IE, IS, IT, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, UK.
Table 1: Classification of most imminent risks for the insurance sector

<table>
<thead>
<tr>
<th>INSURANCE (based on 27 replies)</th>
<th>Average probability of risk</th>
<th>Average impact of risk</th>
<th>Development over the last 6 months</th>
<th>Expected development over the next 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>ranking based on (probability x impact)</td>
<td>1 = low 2 = medium-low 3 = medium-high 4 = high</td>
<td>1 = low 2 = medium-low 3 = medium-high 4 = high</td>
<td>-2 = cons. decrease +2 = cons. increase</td>
<td>-2 = cons. decrease +2 = cons. increase</td>
</tr>
<tr>
<td>Credit risk - Soveigns</td>
<td>2,5</td>
<td>2,7</td>
<td>0,6</td>
<td>0,2</td>
</tr>
<tr>
<td>Credit risk - Corporates and private households</td>
<td>2,3</td>
<td>2,4</td>
<td>-0,1</td>
<td>0,0</td>
</tr>
<tr>
<td>Equity risk</td>
<td>2,4</td>
<td>2,3</td>
<td>0,1</td>
<td>0,0</td>
</tr>
<tr>
<td>Interest rate risk - prolonged period of low interest rates</td>
<td>2,1</td>
<td>2,6</td>
<td>-0,2</td>
<td>-0,5</td>
</tr>
<tr>
<td>Interest rate risk - sharp increase with a resulting fall in bond prices</td>
<td>2,0</td>
<td>2,6</td>
<td>0,5</td>
<td>0,3</td>
</tr>
<tr>
<td>Natural catastrophes</td>
<td>1,9</td>
<td>2,6</td>
<td>0,3</td>
<td>0,0</td>
</tr>
<tr>
<td>Property risk</td>
<td>1,9</td>
<td>1,9</td>
<td>0,0</td>
<td>0,2</td>
</tr>
<tr>
<td>Currency risk</td>
<td>1,7</td>
<td>1,7</td>
<td>-0,1</td>
<td>0,0</td>
</tr>
<tr>
<td>Liquidity risk</td>
<td>1,6</td>
<td>1,9</td>
<td>0,0</td>
<td>-0,1</td>
</tr>
</tbody>
</table>

Source: EIOPA members, data collected until mid-May 2011.

Over the last six months (see Table 2) four of the nine risks mentioned above have increased according to the feedback of national supervisors. The highest increases are reported with regard to sovereign risk, a sharp increase of interest rates with a resulting fall in bond prices, and natural catastrophes. On the contrary, the risk of a prolonged period of low interest rates, currency risk and the credit risk of corporate and private households are considered to be slightly lower than six months ago.

Table 2: Development in risks for the insurance sector over the last 6 months

<table>
<thead>
<tr>
<th>INSURANCE (based on 27 replies)</th>
<th>Development over the last 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>ranking based on (probability x impact)</td>
<td>-2 = cons. decrease +2 = cons. increase</td>
</tr>
<tr>
<td>Credit risk - Sovereigns</td>
<td>0,6</td>
</tr>
<tr>
<td>Interest rate risk - sharp increase with a resulting fall in bond prices</td>
<td>0,5</td>
</tr>
<tr>
<td>Natural catastrophes</td>
<td>0,3</td>
</tr>
<tr>
<td>Equity risk</td>
<td>0,1</td>
</tr>
<tr>
<td>Liquidity risk</td>
<td>0,0</td>
</tr>
<tr>
<td>Property risk</td>
<td>0,0</td>
</tr>
<tr>
<td>Credit risk - Corporates and private households</td>
<td>-0,1</td>
</tr>
<tr>
<td>Currency risk</td>
<td>-0,1</td>
</tr>
<tr>
<td>Interest rate risk - prolonged period of low interest rates</td>
<td>-0,2</td>
</tr>
</tbody>
</table>

Source: EIOPA members
For the next six months (see Table 3), three risks are expected to increase, partially continuing the trends of the past, e.g. with regard to the sharp increase of interest rates with a resulting fall in bond prices and sovereign risk, but also property risk is expected to increase slightly.

Table 3: Expected risks for the insurance sector over the next 6 months

<table>
<thead>
<tr>
<th>INSURANCE (based on 27 replies)</th>
<th>Expected development over the next 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>ranking based on (probability x impact)</td>
<td>-2 = cons. decrease</td>
</tr>
<tr>
<td>Interest rate risk - sharp increase with a resulting fall in bond prices</td>
<td>0,3</td>
</tr>
<tr>
<td>Credit risk - Sovereigns</td>
<td>0,2</td>
</tr>
<tr>
<td>Property risk</td>
<td>0,2</td>
</tr>
<tr>
<td>Credit risk - Corporates and private households</td>
<td>0,0</td>
</tr>
<tr>
<td>Natural catastrophes</td>
<td>0,0</td>
</tr>
<tr>
<td>Equity risk</td>
<td>0,0</td>
</tr>
<tr>
<td>Currency risk</td>
<td>0,0</td>
</tr>
<tr>
<td>Liquidity risk</td>
<td>-0,1</td>
</tr>
<tr>
<td>Interest rate risk - prolonged period of low interest rates</td>
<td>-0,5</td>
</tr>
</tbody>
</table>

Source: EIOPA members

LOCAL MARKET DEVELOPMENTS

In addition to the quantitative answers reported above, members have provided qualitative assessments of market conditions, key aspects of the life and non-life insurance sectors, and the main risks and challenges as they are observed in local markets. A summary of this input is provided below.

In EIOPA’s view the insurance sector across Member States appears to be generally resilient. This is despite an emerging bifurcation between sovereigns with fiscal difficulties and sovereigns experiencing economic growth. Life and non-life companies are well capitalised with solvency ratios reported above 150%.

A moderate to strong increase is observed in gross premiums in the life sector, primarily due to the growth of single-premium, unit-linked and products with capital or return guarantees. Significant gross premium growth is, for example, observed in CZ and PT in life business, while moderate increases are reported in AT, EE, IE, stagnation to declining trends are reported by, among others, HU, SE.

While a few Members report slight improvements in financial results of life and non-life companies, it seems that no clear positive or negative trend can be identified across Member States. It is mentioned that increased weather-related claims from storms and floods put pressure on the financial results of some companies. Also, lower returns on assets, due to volatile financial markets and the macroeconomic downturn, are highlighted as one of the root causes for the mixed financial results of the European life and non-life sectors.

Market evolutions during 2010, and the first part of 2011, have however not changed in any significant way the solvency situation of the pension and oc-
occupational pension sectors in Europe. The sectors are reported to remain well capitalised.

**Key aspects**

A number of key aspects and developments in the European life and non-life insurance sectors have been singled out by Members.

Increased competition, in both life and non-life sectors, is mentioned as one such key aspect. For example, in NL life products are increasingly being offered by new entrants to the market, e.g. by banks and asset managers, which naturally increases the competitive pressure in this market segment. Also non-life businesses have experienced increased competition due to new entrants. This is the case for motor and property insurance business in CZ, NO, SK.

A particular issue pertains to the market for insurance products in ES. It is reported that due to the restructuring process in the banking sector, of the saving banks, and the predominantly used bankassurance model in ES, the industry will face severe challenges regarding the design of selling-strategies for the distribution of their products in the future.

Single premium products are highlighted as experiencing a particular high growth rate in, for example, CZ and DE.

In terms of assets held by occupational pension funds and insurance companies, it has been mentioned by a large group of Members that no major changes in asset compositions have been observed during the period under review. Among others AT, EE, IE, PL, PT, report that despite the current fiscal unrest in a number of European sovereigns, and the preference for fixed-income products by these investors, no major changes to asset allocations are seen. It is however mentioned by one Member, that while the overall allocation to government bonds has remained stable during the period, there might have been minor country allocation adjustments within the government bond allocation. However, based on information collected by Members from the industry, there is no hard evidence indicating any major country or asset type reallocations. Only SE reports that companies seem to have increased somewhat their exposure to credit risk, equities and real estate, while having reduced foreign exchange exposures.

**Risk and challenges**

The overarching and somewhat interconnected risk themes, which have been on the economic agenda for some time now, remain unchanged: (i) sovereign risk; (ii) the low yield environment, and the risk of not meeting issued interest rate guarantees; and (iii) the search for yield and the additional risk assumed in this process. Emerging themes may well follow on the back of these three well-known risk factors. The list could contain events such as further developments in the sovereign bond markets in Europe, renewed strains on the banking sector, further deterioration of the US economy and fiscal budget, imbalances and further uneven growth rates within the Eurozone economies and following political and macroeconomic risks.

As regards the risk themes highlighted by Members, a prolonged period of low yields is seen as a central source of risks, although currently some other risk factors are seen to be more relevant (see Table 3). If left unattended, companies could be incentivised to search for yield and thereby load additional risk exposures on the asset side of their balance sheets, if such a scenario materialises. These investment incentives could emerge as a result of increased competition, and the limited potential to generate income from the core business activities, i.e. by underwriting new policies. The three mentioned effects: low yields, increased competition, and limited core busi-
ness activities, emerge simultaneously in a recessionary economic environment such as Europe experienced in the past years. In addition, in an environment where government yields are located at low levels, interest rate guarantees become hard to fulfil. Unless such guarantees are lowered by law, companies are put under additional pressure to generate income, by taking on more risky investments than they would under normal circumstances. Also, as a result of an economic crisis “mode”, the remaining economy and industrial enterprises face difficulties, and the average credit rating of governments and industrial corporations would therefore deteriorate. As such, investment opportunities in sub-prime investment vehicles increase in supply, making it relatively easier for insurance companies to engage in such investments.

As highlighted by several Members, it is important to be vigilant and to contain and monitor these risks described above. Otherwise, it can be envisaged that weaker capitalised insurance companies could suffer unsustainable losses from their investment activities.

4. Variable Annuities

Variable annuities (VAs) are unit-linked life insurance contracts with investment guarantees which, in exchange for single or regular premiums, allow the policyholder to benefit from the upside of the unit but be partially or totally protected when the unit loses value.

These products are very popular in the US (where they have been sold since the 1990s) as well as in some other markets such as Japan. However, particularly in the US the recent financial crisis caused severe losses for some important insurers. In Europe, VAs are becoming increasingly widespread too, as the possibility to gain from the exposure to some kind of securities and being protected against possible disruption in the financial market at the same time, make them quite appealing.

The recent developments and the increased complexity of the VAs raise new kinds of issues for insurers and supervisors, and also for policyholders, and gave the input to EIOPA to setting up common EU guidelines for supervisors that would foster convergence and spread best practices on this issue. To this end a Report on VA which addresses different aspects related to this line of business is available on the EIOPA website (https://eiopa.europa.eu/fileadmin/tx_dam/files/publications/reports/Report-on-Variable-Annuities.).

Brief VAs’ description

There is no a precise definition of VAs so far. Indeed a number of different features concur to the setting up of this kind of product. In any case, considering that the guarantees embedded in the products are the starting point for the identification as VAs, and considering that there are a huge variety of existing guarantees it would be appropriate to adopt a “substance over form” principle, when classifying a Life contract as VAs.
That said, the basic components of VA products are:

- a unit linked single or regular premium product providing exposure to the financial market (equity, bonds, other real assets);
- a structure which allows switch to an annuity or to other kind of regular income;
- one or more guarantees. The most common benefits attaching to the VAs contracts are:
  - GMWB (guaranteed minimum withdrawal benefits): deferred or immediate, temporary or lifelong income stream even if the account value has fallen to zero;
  - GMAB (guaranteed minimum accumulation benefit): Minimum guaranteed capital after a predefined period;
  - GMIB (guaranteed minimum income benefit): Minimum guaranteed lifetime or term annuity starting at a predefined age on a defined benefit base;

All in all these guarantees have a maturity and a complexity that is generally greater than those arising from liquid options, or options sold by investment banks. This involves an increase of risks for insurers relative to pure unit-linked product.

The complexity of the product, which implies the use of skilled people, IT infrastructure, technical expertise explain why actually the VAs are sold by large insurance groups either by their local subsidiaries or by specific subsidiaries dedicated to that business (through freedom of establishment or freedom of service). It could happen that the insurance undertakings involve other entities in the different process of the VAs’ creation (design of the product, aggregation of the risks, hedging, distribution). These entities could be either part of the group or outside the group (outsourcing): the latter solution makes them more exposed to some sort of “monopoly power” as the entities which have the financial engineering techniques at disposal are few whereas the former case could contributes to the opaqueness of the products making more difficult to identify, within the group, who ultimately bear the risk.
In order to efficiently manage risks linked to VAs, insurers often have in place a hedging programme, and/or they transfer the risks to a reinsurer or to an investment bank.

Hedging is a key element in VA. The Hedging programme could be static or dynamics (i.e.: involves the calculation of the “greeks”). The dynamic hedging is well recommended but it is something rather difficult to manage: there should always be the case of insurance undertakings which proved not to be able to hedge the guarantees they attached to their products; or the risks that the dynamic hedging program did not work as well as expected. The need to go to the market in order to meet the policyholders rather than the supervisors expectation, make these product very sensitive, and potentially could trigger some sort of herd behaviour in case of turbulence in the market itself. Additionally, especially when the hedging programme is outsourced the risk of contagion is well present.

To conclude, it is apparent that such structured products require an appropriate governance structure (rather than an internal control system) in order to ensure a clear and adequate allocation of tasks within the company/group, and a sound risk framework so to efficiently manage different kind of risks (i.e. operational risk, legal risks, etc.).

The issues related to the complexity of the VAs just briefly mentioned, raised the question whether a more widespread variable annuities may be the source of systemic risks or generate procyclicality in the case of a market downturn. To this end there is consensus at the moment that VAs are not to be seen per se as a source of systemic risk mainly because they are not, so far, too widespread in continental Europe, but learning from the US experience they might in the future foster and implement systemic risks.

Size of the VAs market in EU

In winter 2010 EIOPA has conducted a survey, concentrating on larger insurance groups, with the aim of ascertaining the size (measured in premiums written and in technical provisions) and the characteristics of the VA market.

The market volume measured in technical provisions amounts to 168 bn EUR at year end 2009 and to 188 bn EUR at the end of H1/2010 in aggregate, indicating a 24% year-on-year growth for the groups participating in the survey.

The following tables illustrate market developments in 2009/2010 (in million EUR):

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>H1/2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EEA</td>
<td>NonEEA</td>
</tr>
<tr>
<td>Number of Policies written⁵</td>
<td>16.644.801</td>
<td>1.363.319</td>
</tr>
<tr>
<td>Gross Written Premiums</td>
<td>1.894</td>
<td>24.540</td>
</tr>
<tr>
<td>Net Written Premiums</td>
<td>1.883</td>
<td>24.482</td>
</tr>
<tr>
<td>TP Gross - S1-Valuation</td>
<td>3.241</td>
<td>167.639</td>
</tr>
<tr>
<td>TP Net - S1-Valuation</td>
<td>3.261</td>
<td>164.200</td>
</tr>
</tbody>
</table>

⁵ Including multi-year contracts
### Accepted Business

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>H1/2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EEA</td>
<td>NonEEA</td>
</tr>
<tr>
<td>Number of Policies written</td>
<td>37.382</td>
<td>608.006</td>
</tr>
<tr>
<td>Gross Written Premiums</td>
<td>20</td>
<td>263</td>
</tr>
<tr>
<td>Net Written Premiums</td>
<td>20</td>
<td>253</td>
</tr>
<tr>
<td>TP Gross - S1-Valuation</td>
<td>65</td>
<td>2.481</td>
</tr>
<tr>
<td>TP Net - S1-Valuation</td>
<td>65</td>
<td>2.124</td>
</tr>
</tbody>
</table>

Most policies are single premium contracts (90.8% of gross written premiums in H1/2010). Based on the definition of variable annuities set out in this paper the survey suggests that most contracts (72.2% of gross written premiums) include a minimum death benefit. Regarding minimum living benefits GMAB seems the most frequent feature (38.9%), followed by GMWB (27.8%) and GMIB (20.5%, all measured as percentage of gross written premiums).

### Developments in the European reinsurance sector

**GENERAL COMMENT**

2010 was among the worst years of major disasters in recent decades. The biggest disasters were the Chilean and Haitian earthquakes and European storms and most of them had already occurred within the first three months of 2010.

2011 started even worse. Several major events already impacted reinsurers, two severe floods hitting Australia at the far end of 2010 and right at the beginning of 2011, the earthquake in New Zealand in February, the earthquake in Japan followed by a destructing tsunami in March and finally parts of the US south and Midwest being devastated by tornados in April. Furthermore the impact on the reinsurers caused by the Mississippi flood is not assessable at the moment.

Reinsurers already depleted their large loss budgets with those events. However the hurricane season is still ahead.

Although the profit outlooks of reinsurers have been struck, it is unlikely for a widespread increase of reinsurance prices.

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6 No information for UK available  
7 Including multi-year contracts  

In 2010, a total of 950 natural catastrophes were recorded of which 90% were weather-related events like storms and floods.9 Catastrophic events caused overall insured losses of approximately USD 37bn, while overall losses totalled USD 130bn. Those losses were higher than the average of the past ten years and one of the six most severe years for the past twenty years.

The year 2010 ended with the first major flood in Queensland, Australia. It was the worst catastrophe to hit Queensland in 50 years. The floodwaters covered an area the size of France and Germany together. Due to the fact, that dozens of communities as well as the infrastructure were destroyed and in addition the important coal industry in the region was crippled, the economic losses reached USD 13bn.10 As this seemed to be not enough shortly after that the state Victoria was also flooded as well causing economic losses of about USD 2bn.11 Both floods will probably cost the (re-) insurance industry up to USD 6bn.12

In February New Zealand’s second largest town Christchurch was partly destroyed by a major earthquake. The insured losses could reach up to USD 12bn; already exhausting major parts of the reinsurer’s catastrophe losses budgets.13

Both events were topped by far by the earthquake and the following devastating tsunami in Japan. In addition a nuclear power plant exploded and caused nuclear fallout in some regions of Japan. The catastrophe in Japan is dealt with in the following section.

Finally a whole series of tornados went through parts of the South and Midwest of the United States, killing more than 162 people and also devastating parts of Mississippi, Alabama and other states.14

Table 4: Largest losses beginning 2011 (estimates)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Region</th>
<th>Insured Loss USD bn</th>
<th>Economic Loss USD bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.03.2011</td>
<td>Earthquake</td>
<td>Japan</td>
<td>25 - 35</td>
<td>300</td>
</tr>
<tr>
<td>22.02.2011</td>
<td>Earthquake</td>
<td>New Zealand</td>
<td>12</td>
<td>n.a.</td>
</tr>
<tr>
<td>Dec 2010 / Jan 2011</td>
<td>Floods</td>
<td>Australia</td>
<td>6</td>
<td>up to 20</td>
</tr>
<tr>
<td>April / May 2011</td>
<td>Tornado series</td>
<td>USA</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Due to the fact, that not every economic loss is covered by insurance policies15, the insured losses are low compared to the economic losses.

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9 See Munich Re press release. 3 January 2011.
13 See Handelsblatt, page 36, 7 March 2011.
THE JAPANESE EARTHQUAKE AND TSUNAMI ON 11 MARCH 2011

A magnitude 9.0 earthquake hit Japan on 11/03 at 2:46 p.m. local time, some 370 km north-east of Tokyo, followed by a tsunami which flooded the north-eastern coast of Japan. About 25,000 people were killed and more than 100,000 buildings were damaged or destroyed.

Following the earthquake, operations in some nuclear power plants were shut down due to failures in the cooling systems. At the Fukushima Dai-ichi nuclear power plant (250 km northeast of Tokyo), such a failure triggered a nuclear meltdown with evaporating radiation.

Estimates on the economic losses by the earthquake and tsunami (excluding potential damage due to radiation) still vary widely; according to figures released by the Japanese government\(^\text{16}\) up to 300 bn USD might be realistic. Compared to this figure, which would make this event the most expensive natural catastrophe of the recent past, insured losses appear relatively small with estimations ranging around 30 bn USD\(^\text{17}\), less than half of the claims caused by Hurricane Katrina in 2005; losses for international reinsurers are expected to be up to 15-20 bn USD.

Among the most affected insurance lines of business are various types of property&casualty insurance:

- With regard to residential property, only a minority of households has earthquake&tsunami coverage (roughly 20-30%). Furthermore claim pay-outs are paid through a central reinsurance counterparty (Japan Earthquake Reinsurance, a kind of public-private partnership) that covers part of the losses. Once losses get large (>1.9 trn JPY), the government de facto backstops them. Further, there is a conservative provisioning regulation for earthquake insurance which should mean that insurers have funds available to cover losses that they do have to pay out.

- On the commercial side, again, many objects are not or only partially covered for earthquake&tsunami (e.g. for fires resulting from earthquakes). The policies that are written are reinsured internationally to a large degree. Some figures for losses would point towards them being manageable – particularly given the fact that insurers' reserves are quite full.

- According to AON Benfield\(^\text{18}\), in specialty lines, early indications are that reinsurers will be minimally affected since the region devastated is a non-industrial area. Segments such as Aviation, Specie, Offshore Energy and P&I are not expected to produce significant claims to the reinsurance market. Even in Hull business most of the vessels seen in the media coverage were fishing vessels, whose coverage is largely retained domestically. Only a small number of Japanese ocean-going vessels were damaged, and none of these are confirmed as a total loss so far. As to cargo, there have been few reported large risk loss-

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\(^{17}\) EQUECAT published an estimate of 12-25 bn USD on 16/03, AIR Worldwide forecasted 20-30 bn USD on 25/03, and Towers Watson estimated 20-45 bn USD on 04/04.

es and at present the overall cost is expected to be relatively small for an event of such magnitude.

- Business interruption due to natural catastrophes is not widespread in Japan, though this line of business might be affected to some extent in Europe if Japanese corporations cease their supply e.g. in case of high-tech products.

- Losses caused by nuclear accidents that are triggered by natural catastrophes are usually excluded from nuclear liability insurance policies. Moreover, under the Japanese Nuclear Act of 1961, nuclear power station operators are not held liable for nuclear liability damage triggered by “extraordinary great natural disasters”.

- The impact on life insurance depends on mortality and hospitalization. Although, according to Risk Management Solutions\(^{19}\), life insurance coverage is high in Japan, with about 90% of the population covered by an individual policy and the average coverage exceeding 300,000 USD, capital buffers of life insurance undertakings should be sufficient.

The EQECAT and Towers Watson estimates break down into the following lines of business:

<table>
<thead>
<tr>
<th>Line of Business</th>
<th>EQECAT(^{20}) 16/03 (bn USD)</th>
<th>Towers Watson(^{21}) 04/04 (bn USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>From ... To ...</td>
<td>From ... To ...</td>
<td></td>
</tr>
<tr>
<td>Residential property</td>
<td>8-15</td>
<td>9.5-21.9</td>
</tr>
<tr>
<td>Commercial property</td>
<td></td>
<td>4.7-11.0</td>
</tr>
<tr>
<td>Auto</td>
<td>0-1</td>
<td>0.2-0.7</td>
</tr>
<tr>
<td>Marine</td>
<td>1-3</td>
<td>1.1-1.5</td>
</tr>
<tr>
<td>Life</td>
<td>2-3</td>
<td>2.9-4.6</td>
</tr>
<tr>
<td>Personal Accident</td>
<td>1-2</td>
<td>n.a.-n.a.</td>
</tr>
<tr>
<td>International Insurance</td>
<td>n.a.-n.a.</td>
<td>1.5-5.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12-25</strong></td>
<td><strong>20-45</strong></td>
</tr>
</tbody>
</table>

Losses for international reinsurers are expected to be in a region of 15-20 bn USD. The large European reinsurance firms published first loss estimates quite soon after the event:

**Munich Re**\(^{22}\): On 22/03, Munich Re published a loss estimate of 1.5 bn EUR which was based solely on modelling. Especially for non-proportional reinsurance contracts it will prove difficult for quite a while to come up with more precise loss figures. The main uncertainties are seen in business interruptions caused by hampered trade flows. Already on 09/03, Munich Re stated that due to the floods and cyclone Yasi in Australia as well as due to the Christchurch earthquake in New Zealand, the 2011 catastrophe budget is already nearly exhausted.


\(^{20}\) [http://www.eqecat.com/catWatchREV/secureSite/report.cfm?id=313](http://www.eqecat.com/catWatchREV/secureSite/report.cfm?id=313)


**Swiss Re**\(^{23}\): On 21/03, Swiss Re estimated the claims due to the earthquake and the tsunami to be about 1.2 bn USD, though this figure would be subject to “a higher-than-usual degree of uncertainty”.

**Scor**\(^{24}\): As a worst-case scenario, total P&C losses might be up to 185 mill EUR while in life reinsurance the exposure was only marginal.

**Hannover Re**\(^{25}\): On 23/03, a loss estimate of 250 mill EUR was published, also subject to considerable uncertainty.

**Lloyd’s of London**: On 13/05, Lloyd’s disclosed an estimated 1.95 bn USD exposure to the Japanese earthquake and tsunami.

In the weeks after the earthquake, credit rating agencies kept the ratings of Japanese primary insurers and international reinsurers unchanged, referring mainly to the public-private burden sharing of earthquake damage and the possibility of reinsurers to recover losses quickly in the annual round of reinsurance renewals which was due in April.

The majority of reinsurance contracts in the Asia-Pacific region are renegotiated annually as of 1 April – this was considered (not only by the credit rating agencies) to be positive as higher premiums could quickly mitigate the losses. While some pricing negotiations which were originally due on 01/04 were delayed by a couple of weeks, prices for earthquake and tsunami coverage increased on average by 25-50%. This compares to a 50-100% hike in peak-zone catastrophe rates after Hurricane Katrina in 2005, according to Towers Watson.\(^{26}\)

About one dozen catastrophe bonds and other insurance-linked securities with a total notional value of 1.7 bn USD are known to have an exposure towards earthquake and tsunamis in Japan, although the vast majority of them are multi-event transactions which are not solely triggered by this specific event. Nevertheless most of these instruments declined in value as investors are concerned that they might suffer capital losses if the next catastrophe strikes. Cat bond indices dropped noticeably: The Swiss Re Cat Bond Price Index dropped by more than 4% between 04/03 and 01/04; this was the biggest four-week drop ever recorded since the inception of this index.

The economic impact is still difficult to assess, given the ongoing uncertainty in the Fukushima nuclear power plant: As industrial production slumped by more than 15% in March, growth forecasts for the Japanese 2011 GDP have been reduced by up to 0.5 percentage points; in 2012 reconstruction might show a positive effect with equivalently higher growth rates.

| Table 5: Number of fatalities 2010\(^{27}\) |
|---|---|---|---|---|
| Date | Event | Region | Fatalities | Economic |

\(^{23}\) http://www.swissre.com/media/news_releases/pr_20110321_japan.html


\(^{25}\) http://www.hannover-re.com/media/press/pr110323/index.html

\(^{26}\) http://www.towerswatson.com/press/4209#

\(^{27}\) See Munich Re NatCatSERVICE, press release, 3 January 2011.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Loss USD bn</th>
<th>Loss USD bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.01.2010</td>
<td>Earthquake</td>
<td>Haiti</td>
<td>222,570</td>
<td>8.0</td>
</tr>
<tr>
<td>July – Sept. 2010</td>
<td>Heat wave / wildfires Russia</td>
<td>Russia</td>
<td>56,000</td>
<td>n.a.</td>
</tr>
<tr>
<td>13.04.2010</td>
<td>Earthquake</td>
<td>China</td>
<td>2,700</td>
<td>n.a.</td>
</tr>
<tr>
<td>July – Sept. 2010</td>
<td>Floods</td>
<td>Pakistan</td>
<td>&gt;1,760</td>
<td>15.0</td>
</tr>
<tr>
<td>07.08.2010</td>
<td>Landslides</td>
<td>China</td>
<td>1,467</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

**MARKET TRENDS**

In recent years, an increasing number of reinsurers located in other parts of the world, that are moving to Europe to establish their business has risen. Regulatory changes in Europe related to the Solvency II Directive and taxation-related issues in the US have increased the attractiveness of a number of European countries, especially Ireland, Netherlands and Luxemburg and outside the EU Switzerland. The significant shift toward Europe results in accounting for about 60% of the global net reinsurance premiums.

*Figure 18: Global reinsurance market share as of 2009*

So far, five of the six largest and longest standing global reinsurers are based in Europe. The European “Big Five” - Munich Re, Swiss Re, Hannover Re, Lloyd’s and SCOR - are still dominating the global reinsurance market. As regards the regional distribution within the European Union, major reinsurers have their headquarters domiciled in DE, CH, FR, UK and Luxembour.

**DEVELOPMENTS IN THE REINSURANCE SECTOR 2011**

2010 was characterised by the rebound of the financial market, relatively low insured catastrophic losses and effective capital management as well as favorable casualty reserve development. The subdued losses, mainly due to an unexpectedly low-loss hurricane season, combined with unrealised in-

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vestment gains led to an increase of reinsurers’ capital.\textsuperscript{31} As a result share buyback programs continued and dividends increased, so that capital still remains in excess of demand of capacity.\textsuperscript{32}

This resulted in lower reinsurance rates in 2011 of about 5% to 10\%.\textsuperscript{33} The Guy Carpenter Global Property Catastrophe (ROL) Index lost 7.5\%, the second consecutive decline.\textsuperscript{34}

Figure 19: Guy Carpenter Global Property Catastrophe (ROL) Index

\hspace{1cm}

So far cedents are buying similar amounts of cover to 2010, with purchasing appetite helped by attractive pricing.

In contrast to reinsurers’ capital the capital of primary insurers only increased by about two percent, reflecting the soft market.\textsuperscript{35} Reinsurance is a form of underwriting capital and it is now due to the weak market substantially cheaper than equity capital. Many insurers use the chance to act on substantial value-enhanced share repurchasing programs if additional working capital from reinsurance structures is executed.\textsuperscript{36}

Depending on the loss experience in 2011 there could be at some point a catalyst for a change in the markets’ price direction. The losses seen in 2011 so far could at least stem the decline of reinsurance rates. After the earthquake in Japan the spreads for cat bonds almost doubled. In addition

\begin{itemize}
\item \textsuperscript{31} See Guy Carpenter Global Reinsurance Outlook, January 2011, page 3.
\item \textsuperscript{32} See AON Benfield Reinsurance Market Outlook, January 2011, page 6
\item \textsuperscript{33} See Versicherungswirtschaft Heft 2, 15 January 2011, page 90.
\item \textsuperscript{34} See Guy Carpenter Global Reinsurance Outlook, January 2011, page 3.
\item \textsuperscript{35} See AON Benfield Reinsurance Market Outlook, January 2011, page 8.
\item \textsuperscript{36} See AON Benfield Reinsurance Market Outlook, January 2011, page 3.
\end{itemize}
excess-of-loss covers for natural catastrophe covers rose between 5% and 50% in Japan.\(^{37}\)

Furthermore reinsurance industry consolidation in the form of share buyback programs and the increasing potential for M&A activities could restrict the supply of reinsurance capital and could at least stabilise rates.\(^{38}\)

**M&A ACTIVITIES**

With no positive outlook to grow profitably in the reinsurance market due to unprofitable rates and the low-yield investment environment, that provides an alternative between record low yielding or high risk assets, Mergers & Acquisitions (M&A) became more interesting. The financial crisis of 2008 seriously hit the M&A activities.

*Figure 20: M&A activity*\(^{39}\)

Investment portfolios were crushed along with significant drops of GDPs. This raised the pressure on the already soft reinsurance markets and led to time values of reinsurance companies still far below their value before the crisis started.

In 2010, M&A activity picked up dramatically. Activities were driven by the stabilisation of the financial markets which allowed buyers and sellers to better evaluate the risks and rewards of a transaction. Many reinsurers believe that taking over a company is better than a costly organic growth and the persistence of low valuations forced sellers to adjust to more realistic levels.\(^{40}\)

**INSURANCE LINKED SECURITIES**

In 2010, the insurance linked securities (ILS) sector increased. 23 catastrophe bond transactions were closed in 2010, totaling USD 4.9bn in notional

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\(^{37}\) See Versicherungswirtschaft Heft 8, 15. April 2011, page 533.

\(^{38}\) See Guy Carpenter Global Reinsurance Outlook, January 2011, page 17.

\(^{39}\) See AON Benfield Reinsurance Market Outlook September 2010, page 10.

\(^{40}\) See AON Benfield Reinsurance Market Outlook, January 2011, page 12.
issuance volume, exceeding both the number of deals (18) and the issuance volume (USD 3.4bn) observed in 2009.\textsuperscript{41}

Most of the cat bonds issued (10) contained US hurricane perils, while 6 transactions covered European windstorm risks and so gave investors the chance to diversify their investments. Several ILS funds investors are believed to increase their investments in 2011 as well as new investors find it more attractive to invest in ILS due to a low yield environment. So the cat bond sector is likely to stay at least robust with the issuance volume.

In 2011, it is expected, that the issuance volume will reach USD 6bn.\textsuperscript{42} Hence, the worldwide volume of insurance linked securities could increase to USD 13bn.

Investments in cat bonds are risky. The earthquake in Japan affected cat bonds issued and it is likely that some cat bonds will default.\textsuperscript{43} In addition the hurricane season is still ahead of us and it might not get off as lightly as seen in 2010, when no single major hurricane hit the US coast.

For a further assessment of the CAT bond market see the following graph which depicts the Swiss Re CAT bond Total Return & Price Index:

\textit{Figure 21: Swiss Re Total Return & Price Index}\textsuperscript{44}

\textbf{COMPANY INFORMATION}

Despite the fact that Munich Re was impacted by high claims of major losses, \textbf{Munich Re} recorded an operating result of EUR 2.9bn for 2010, a de-
crease of 28.2% compared to 2009.\textsuperscript{45} The premium income grew by over 8% to EUR 23.6bn. The combined ratio in property casualty reinsurance reached 100.5\% of net earned premiums for the year as a whole, containing 11.0\% points for natural catastrophe losses, which is well above the average of 6.5\%. The combined ratio benefited from a moderate reduction of claims provisions. The investment result contributed EUR 3.4bn to the operating profit.

In the first quarter 2011, the result was hit by natural catastrophe losses. The combined ratio for the first quarter was 159.4\%; about 69\% points of this were due to natural catastrophes. As a consequence, the operating result decreased to EUR -1.3bn, while investment income reached EUR 1.3bn.\textsuperscript{46}

**Swiss Re** was able to increase the full year net income to USD 2.3bn in 2010.\textsuperscript{47} The operating income of the property casualty (P&C) reinsurance reached USD 2.5bn, down 30\% due to higher large losses and lower net investment income. Compared to 2009, the combined ratio for P&C reinsurance increased to 93.9\%. Life & Health contributed USD 810mn. Investment income achieved an operating income of USD 4.5bn due to lower impairments and lower hedging costs. In 2010, the convertible perpetual capital instrument issued to Berkshire Hathaway was terminated. This had an impact on the overall net income; it fell to USD 863mn.

Due to very high levels of natural catastrophe claims, Swiss Re reported a net loss of USD 665mn in the first quarter of 2011. P&C reported an operating loss of USD 1.2bn in the first quarter. The combined ratio of P&C rose to 163.7\%; the net impact of natural catastrophes on the combined ratio was 89.4\% points. Life & Health reported an operating income of USD 144mn, while asset management delivered USD 1.2bn.

**Hannover Re**’s gross written premium rose by 11.2\% to EUR 11.4bn. In 2010, there was a slightly higher combined ratio of 98.2\%. Major losses caused a total net expenditure of EUR 662mn; this was above the expected level of EUR 500mn. Despite the burden of major losses the operating profit increased to EUR 1.2bn\textsuperscript{48}, this resulted in a group net income of EUR 749mn. Investment income improved to EUR 1.3bn.

In the first quarter of 2011 the combined ratio of Hannover Re property casualty reinsurance business reached 123.8\% because of the impact of the major losses.\textsuperscript{49} The major losses resulted in a net burden of EUR 572mn, which already exceeded the major loss budget for the entire year of EUR 530mn. The P&C reinsurance business operating result dropped to EUR -25mn. However, Hannover Re managed to achieve an operating profit of EUR 46mn.

**SCOR** managed to generate a net income of EUR 418mn in 2010, up by 13\% compared to the figures in the previous year.\textsuperscript{50} The total gross written

\textsuperscript{45} See Munich Re press release, 10 March 2011.
\textsuperscript{46} See Munich Re press release, 9 May 2011.
\textsuperscript{47} See Swiss Re news release, 17 February 2011.
\textsuperscript{48} See Hannover Re press release, 9 March 2011.
\textsuperscript{49} See Hannover Re press release, 3 May 2011.
\textsuperscript{50} See SCOR press release, 8 March 2011.
premiums reached EUR 6.7bn, representing an increase by 4.9%. SCOR realised a combined ratio of 98.9% in 2010 in spite of major loss events.

The first quarter 2011 was marked by a series of exceptional catastrophe losses for SCOR. Therefore the property casualty net combined ratio stands at 135.2%, of which 46.3% points are linked to natural catastrophes. As a result the net income fell to EUR -80mn.²¹

**Lloyd’s of London:** The market’s reinsurance portfolio contributed 37% (EUR 9.8 billion) to total gross written premiums with an overall growth of 5% in this segment. The combined ratio in this segment significantly deteriorated by 11.9 percentage points to 90.3% in 2010, mainly as a result of a number of natural catastrophes, such as the earthquakes in Chile and New Zealand and the floods in Australia. Lloyd’s of London’s energy reinsurance portfolio was also negatively impacted by the Deep-water Horizon claim. However, underwriting performance continues to be positively influenced by reserve releases from previous underwriting years (9.5 percentage points of combined ratio).

Lloyd’s of London did not publish first quarter 2011 results; however, provided an update of its exposure to various natural catastrophes. The current net estimates are:

- 1.95bn USD - Japan earthquake and tsunami
- 1.2bn USD - New Zealand earthquake
- 650m USD - Australia flooding

**6. Developments in the European occupational pension funds market**

This section highlights the main developments that occurred in the European occupational pension fund sector, based on feedback provided by EIOPA Members. Not all EU countries are covered, in some of them IORPs (i.e. occupational pension funds falling under the scope of the EU IORP Directive) are (still) non-existent or are just starting to be established (CZ, HU, MT). In DK, FI, FR and SE the main part of occupational retirement provision is treated as a line of insurance business, and is therefore not covered in all parts of this section.

In addition to the usual data, reporting and analysis timelines for occupational pensions, which for this year’s report looks at 2009, EIOPA has supplemented this information with additional data for 2010. This data was collected where possible on a best effort basis from supervisors for a preliminary view of 2010 taking into account that full figures are not yet available. Data collected for 2010 has provided EIOPA with an approximate view of the financial position of occupational pension funds at the end of 2010. It should therefore not be read as a definitive summary of the current conditions but more as an indicator of the situation.

**RECENT DEVELOPMENTS – MAJOR POLICY REFORMS**

Some countries have seen structural changes and developments in 2009 and 2010 relating to the laws governing occupational pension funds. While

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²¹ See SCOR press release, 4 May 2011.
changes are specific to individual countries there are common trends and aims within the policy developments.

Some reforms of the pension system are under way in several countries to ensure that the pension system will become more robust and sustainable. The reforms are addressed to the public pensions (PL) or to the entire pension system (NL, SI).

Developments aimed at increasing membership are reported by UK and IE that has plans to introduce a requirement for auto-enrolment for all employees into schemes meeting certain criteria (from 2012 and 2014 respectively) aimed at tackling low provision and take up in membership. In AT in 2010 the membership increased significantly as civil servants are now covered by the pension fund system.

Other countries, in order to reduce the public budget deficit and aiming to ensure protection for all workers, decided to transfer assets from some second pillar funds to a public fund (HU) or the Public Social Security system (PT).

Changes in the field of supervisory reporting systems have been seen in PT where major attention has been devoted to the risk management and internal control systems of IORPs. New accounting rules have been introduced in DE.

There have also been developments in disclosure to members and beneficiaries and in education initiatives. IT and SK have introduced new information requirements for pension funds to provide more detailed and personalised information to members. IT supervisor has also strengthened its role in the provision of information to members and set out to promote, together with other national supervisors, an initiative in the field of financial and pension education. As also mentioned in the section on Legislative and regulatory developments, according to the decision by the Court of Justice of the European Union from 1 March 2011, taking the gender of the insured individual into account as a risk factor in insurance contracts constitutes discrimination.

**STRUCTURAL DEVELOPMENTS – ASSETS AND CONTRIBUTIONS**

**Accumulated assets**

The total size of assets as a percentage of GDP gives a good indication of the relative wealth accumulated by the occupational pension fund sector (see Figure 22). The size of occupational pension funds is to a large extent related to their time of enactment and labour market coverage. Countries such as the UK and NL with a relatively long history of occupational pension provision see total assets representing a high portion of GDP. These two countries together make up for the vast majority of the overall assets invested in occupational pension funds across Europe. Data for IS also shows a very high level of assets relative to GDP. The population of Iceland being relatively small, total assets are much below the size of NL and the UK for example, while the relative importance of pension funds for the retirement income of pensioners in Iceland is substantial.

While for many countries the size of the occupational pension fund sector shown is relatively small, this can be partly explained by the fact that the
data shown relate in their main part to IORPs (see Annex 3). However occupational pension benefits may also be provided through other mechanisms such as insurance contracts, which may form part of the retirement income in a country.

Also, traditional public sector pensions or other similar national arrangements can play a dominant role in the retirement system. This is especially the case for some continental European countries. However, we see that some of these countries are putting in place reforms to increase occupational pension provision resulting in increased membership and coverage of IORPs which is especially important with the growing pressures on pay as you go public systems.

Figure 22: Assets as % of GDP

(Note: For SK, LV, PL, RO, BG figures are less than 2%. For the UK figures relate to DB schemes only)
Source: EIOPA

Contributions received

The main source of funding for pension schemes results from the contributions payable by both sponsors and members. Figure 23 shows the total estimated contributions for 2007 to 2009 with the main concentration being in DE, IT, NL and the UK. For a number of countries the gross contributions are relatively small, in part due to the reasons highlighted above regarding the importance of pension funds in the overall retirement income. Figure 24 shows the difference in gross contributions payable between 2007-2008 and 2008-2009. In general, the fluctuations in contributions are correlated with developments regarding employment and wages. Significant variations in contributions might be related to additional contributions paid by employers to improve the funding levels of IORPs (NL, BE, NO, UK) or if important reforms or events have taken place. This is the case for RO where a significant increase took place in 2008 as membership grew and members also chose to contribute more into their schemes.
Figure 23: Gross contributions 2007-2009

Source: EIOPA

Figure 24: Change in contributions 2007-2008 - 2009

(Note: For BG, LI, LV, PL, RO, SI and SK figures are less than EUR 300m. For non Euro area countries, exchange rate fluctuations also impact on the reported figures. Movements in DE in 2007 are due to a shift from a few large industrial companies to IORP schemes. In subsequent years similar shifts turned out to be smaller.)

Source: EIOPA

Defined Benefit vs. Defined Contribution schemes

Figure 25 shows the allocation of contributions towards DB, DC or Hybrid schemes for 2009.

There is a wide spectrum in the levels of coverage between Defined Contribution (DC) or DB provision. In DE only DB schemes are permitted. In some other countries (BE, ES, IS, NL, NO, PT, UK) DB and Hybrid schemes make up the vast majority of the contributions being paid by sponsors. However, in some of these countries there is a reported shift away from ‘traditional DB provision’ as sponsors are increasingly choosing to replace ‘traditional DB plans’ and share a number of the risks with members or to set up DC plans instead. Some of these countries (UK, IE), in future years will likely see an increase in DC schemes following the introduction of automatic enrolment. In the Member States where occupational pensions are at an early stage of development or are even at the beginning of their life, DC is also the predominant but a shift towards DC

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52 Movements in DE in 2007 are due to a shift from a few large industrial companies to IORP schemes. In subsequent years similar shifts turned out to be smaller.
scheme design of choice. This is the case for BG, LV, PL, RO and SI where contributions in 2009 were allocated towards DC schemes only.

This trend from DB to DC will help reduce the vulnerability of sponsors and the pension fund sector as a whole to the funding risks traditionally related to DB plans. On the other hand the shift to DC plans transfers a number of risks to individual members, often requiring them to make difficult decisions such as investment choices and highlighting the need for providing appropriate information to members including financial education. Overall, there is a residual risk that unless suitable DC plans are in place, this movement might result in smaller retirement income than that provided by DB plans.

Figure 25: Allocation of contributions 2009

In general across Europe, we see the membership of IORPs growing. Figure 266 shows the change in membership numbers from 2007 to 2009 and in many Member States, there has been a significant increase over this time period.

This is especially the case in RO which has seen a sharp increase in membership from 2007 as IORPs gain in prominence. During 2009, in RO there were four new voluntary pension funds which started activity, managed by international asset managers. In AT a significant increase in membership rate has been seen when civil servants switched to the pension fund regime. In BE membership grew rapidly in 2007 and 2008 mainly as a result of the introduction of industry wide pension schemes mainly for the blue collar workers (54% in 2007 and a further 39% in 2008). There has also been a significant increase in membership in ES, LV and NO. In most other countries there has also been a steady and positive increase. However, SE saw a significant drop in membership in 2008 due to the liquidation of one IORP, whose members, assets and contributions were transferred to an insurance company.

In DE, as consequence of new accounting rules introduced in 2011 new “Pensionsfonds” have been established. Some companies have chosen to
shift their book reserves schemes to “Pensionsfonds” because of lower administrative costs in managing these obligations.

Some structural trends are under process: in future years a significant increase in membership of DC schemes is expected as a consequence of an increasing shift towards DC schemes and the introduction of new plans; in some countries (NL, UK) the number of pensioners is expected to rise with respect to the number of active participants. Concerns are growing over the decisions taken by some countries to transfer the retirement savings from the private pensions to the pay-as-you-go systems. This decision might help to cut state debt but it could likely increase the problem of financial stability and pension system sustainability in the medium-long term.

Figure 26: Percentage change in membership levels 2007 – 2009

FINANCIAL DEVELOPMENTS – ASSET ALLOCATION, RETURNS AND FUNDING

ASSET ALLOCATION

Figures 27-29 show the aggregate asset allocations across countries for 2007 to 2009 for DB, DC and Hybrid schemes separately.

For DB schemes, in a number of countries (BE, NL, NO, PT and UK) there is a significant part of the investment portfolio dedicated to equities which, while the value and return on equities suffered during the downturn, remain a popular choice of assets. This likely owes to the long term nature of the liabilities in respect of pension schemes and, based on long term empirical evidence, the ability for equities to demonstrate the potential to offer a higher return than bonds. Also, given this long term liability, matching with fixed income or index linked assets is not always possible. The payment of dividends from equities held provides an ongoing source of income to the fund.

In some countries equities are seen as a higher risk investment and IORPs have therefore limited exposure to these assets. This has helped in minimising the immediate effects of the downturn in the equity market. Also, even in those countries that dedicate a significant portion of the assets to equities have seen a gradual move towards the less risky debt and fixed income class. This may be a result of the volatility and uncertainty of equities. For
the UK this is also seen as a natural progression as the DB market gains in maturity.

In countries where the pension promise is linked to a guaranteed return on the contributions rather than a final or average salary, we see a greater investment in debt securities and guaranteed return investments with limited equity exposure. This is due to the underlying guarantee provided to the member and the need to reduce volatility in order to provide a greater degree of certainty over the asset returns year on year in order to meet this promise.

...and DC...

For DC schemes there is a significant variety in the preferred asset allocations. In PT, RO, SI and SK there is a very heavy bias towards debt and fixed income securities making up over 60% of the portfolio (over 90% in SK), AT, BE and PT have over 20% dedicated to equities while in the others there is a bias towards other asset classes. For Hybrid schemes there is again a strong bias for debt and fixed income securities, but equities have a significant role in BE, IS and PT.

These differences and variations for DC and Hybrid schemes will be due to a number of factors, most likely including the nature of the scheme itself, who is making the investment decisions and who bears any type of guarantee or promise and also the nature of the investment market in the country concerned.

Figure 27: Asset allocations for DB

![Asset allocations for DB](image)

Source: EIOPA

Figure 28: Asset allocations for DC

![Asset allocations for DC](image)

Source: EIOPA
Following survey results on a best effort basis, occupational pension funds invested approximately about 14% of total assets in sovereign debt of EEA countries (plus Japan, Switzerland and the United States), 9% of their assets in banks (through bonds, equity and other instruments like loans or deposits) and about 7% of their assets in real estate (via mortgage loans, covered bonds and indirect investments).

According to preliminary data provided by supervisors on a best effort basis, the general exposure to equity markets has been higher in 2010 compared with 2009 and 2008 when the asset allocation shifted towards debt securities, and in particular, towards government bonds either as a reaction to the crisis to reduce exposure to risky assets or as consequence of the variation of asset price. However, the trend in the asset allocation is not clear because this increase in exposure to equity investments could be due to the change in value of assets, as consequence of the substantial recovery of related financial markets, or to the deliberate modification of the asset allocation.

**ASSET RETURNS**

Figure 30 gives an estimate of the rate of return on assets for all schemes from 2007-2009. Sharp drops in the equity markets seen in 2008 put their investment portfolios under severe strain. Some exceptions have been seen e.g. in countries where systems are at an early stage of development or due to the relatively high share of debt securities (FI, DE, RO, BG) as opposed to equities.

The recent financial turmoil hit IORPs primarily in their role as investors and (mainly for DC schemes) members’ confidence. However, in the recent crisis IORPs played a role different to that of other areas of financial services. IORPs did not have the same issues in respect to liquidity and the threat of a ‘run on the bank’ in the same way as the banking sector. Member States either did not experience the closure of any IORP/scheme; or when it happened, the number of closures or wind ups for different reasons has not been exceptional with respect to the previous years.

The nature of an IORP, in that they are designed to provide retirement benefits in the future for members, make it a long term undertaking requiring decision making to focus on the long term interests of scheme members. Focusing on a single year’s return can give a misleading picture of the ability of pension funds to deliver adequate pensions in old age. IORPs also have in
many countries a number of security mechanisms available to them in the event of under-funding.

In 2009, pension funds of all countries realised positive returns (significant for some). Also in 2010, according to preliminary data provided by supervisors on a best effort basis, returns on assets have been positive, although less than those of 2009 as pension funds were affected by both the fluctuations of equity markets and, in the second half of the year, by the impact of the turbulence affecting EU sovereign debt.

Figure 30: Percentage return on assets 2007 – 2009

Source: EIOPA

**AVERAGE FUNDING LEVELS**

As would be expected the financial turmoil reduced the funding levels for DB schemes in 2007 and 2008 across Europe. In some countries funding fell below 100 per cent which is allowed for a limited time by the IORP Directive as long as a concrete and realisable recovery plan is in place. In practice, Member States use different methods and assumptions to determine their technical provisions. This results in significant variations in the size of technical provisions across countries for defined benefit commitments. For example differences exist around the establishment of assumptions (best estimates, levels of prudence) which can have a significant effect on the liabilities and so also on the funding level. Countries also differ markedly in their approaches to inflation protection which often needs to be taken into account in the calculations and can affect the size of the liabilities significantly.

There is also in some countries an interaction between the different elements that make up the pension frameworks across Member States. For example, emphasis on prudent valuation principles, which results in extra reserves, reduces the need for additional security mechanisms. This is also true vice versa where the existence of security mechanisms other than up front capital requirements to the IORP reduces the need for a higher funding level. Overall security or solvency cannot therefore be understood by viewing this figure in isolation without a full appreciation of all the elements involved including the security mechanisms available.

Preliminary data for 2010 provided by supervisors on a best effort basis, shows that the recovery in the financial markets in the last 2 years has had
a significant positive effect on the funding positions of IORPs, although in some countries not yet back to the levels seen in 2007. However while funding levels have improved, there still exists a great deal of uncertainty in the financial markets and the current low interest rate environment also creates differing problems in the DB and DC sector.

Also, for countries where IORPs are not funded to the full level required by the national law, deficit contributions are being paid by sponsors aimed at bringing IORPs up to the required level in their national jurisdiction. As a consequence of the crisis, some supervisory authorities accepted a longer than normal recovery period (NL, UK). A lot of recovery plans, still in place, consisted of amending the financing plan in general leading to a higher level of contributions to be paid and sometimes changing the risk profile of the assets. In NO, as many pension funds chose to keep a high exposure to equities, they needed to raise additional capital in 2008 and the beginning of 2009. In some cases the measures taken implied a reduction of benefits for pension participants (AT, NL) or the removal of the indexation of benefits for some time (NL).

![Figure 31: Funding levels](chart)

**Main risks**

Equity risk, sovereign risk, and the risk of sharp increase of interest rates with a resulting fall in bond prices are the risks with highest overall ranking. Especially equity risk is considered to have an increased probability of mate-

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53 Note that the data for 2010 is very preliminary and often survey-based so should not be read as a definitive view of 2010. Data for technical provisions for PT is provided as an estimate on a best effort basis

54 AT, BG, DE, ES, IT, LU (2 supervisory authorities), LV, NL, NO, PL, PT, SE, SI, SK, UK.
rialisation and also the impact of such a scenario is expected to be significant.

Table 6: Classification of most imminent risks for the occupational pension funds sector

<table>
<thead>
<tr>
<th>Pension Funds (based on 16 replies)</th>
<th>Average probability of risk</th>
<th>Average impact of risk</th>
<th>Development over the last 6 months</th>
<th>Expected development over the next 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>ranking based on (probability x impact)</td>
<td>1 = low</td>
<td>2 = medium-low</td>
<td>3 = medium-high</td>
<td>4 = high</td>
</tr>
<tr>
<td>Equity risk</td>
<td>2,5</td>
<td>2,9</td>
<td>0,1</td>
<td>-0,1</td>
</tr>
<tr>
<td>Credit risk - Sovereigns</td>
<td>2,5</td>
<td>2,6</td>
<td>0,5</td>
<td>0,1</td>
</tr>
<tr>
<td>Interest rate risk - sharp increase with a resulting fall in bond prices</td>
<td>2,3</td>
<td>2,4</td>
<td>0,6</td>
<td>0,4</td>
</tr>
<tr>
<td>Interest rate risk - prolonged period of low interest rates</td>
<td>1,9</td>
<td>2,6</td>
<td>-0,5</td>
<td>-0,2</td>
</tr>
<tr>
<td>Credit risk - Corporates and private households</td>
<td>2,2</td>
<td>2,3</td>
<td>0,1</td>
<td>0,1</td>
</tr>
<tr>
<td>Currency risk</td>
<td>2,0</td>
<td>1,5</td>
<td>0,2</td>
<td>0,0</td>
</tr>
<tr>
<td>Property risk</td>
<td>1,7</td>
<td>1,5</td>
<td>0,0</td>
<td>0,1</td>
</tr>
<tr>
<td>Liquidity risk</td>
<td>1,4</td>
<td>1,6</td>
<td>0,2</td>
<td>-0,2</td>
</tr>
</tbody>
</table>

Source: EIOPA members

... over the past months

Over the last six months (see Table 7) a majority of the eight risks mentioned above have increased according to the feedback of national supervisors. The highest increases are reported with regard to a sharp increase of interest rates with a resulting fall in bond prices, and with regard to sovereign risk. On the contrary, the risk of a prolonged period of low interest rates is considered to be slightly lower than six months ago.

Table 7: Development in risks for the occupational pension funds sector over the last 6 months

<table>
<thead>
<tr>
<th>Pension Funds (based on 16 replies)</th>
<th>Development over the last 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>ranking based on (probability x impact)</td>
<td>-2 = cons. decrease</td>
</tr>
<tr>
<td>Interest rate risk - sharp increase with a resulting fall in bond prices</td>
<td>0,6</td>
</tr>
<tr>
<td>Credit risk - Sovereigns</td>
<td>0,5</td>
</tr>
<tr>
<td>Currency risk</td>
<td>0,2</td>
</tr>
<tr>
<td>Liquidity risk</td>
<td>0,2</td>
</tr>
<tr>
<td>Equity risk</td>
<td>0,1</td>
</tr>
<tr>
<td>Credit risk - Corporates and private households</td>
<td>0,1</td>
</tr>
<tr>
<td>Property risk</td>
<td>0,0</td>
</tr>
<tr>
<td>Interest rate risk - prolonged period of low interest rates</td>
<td>-0,5</td>
</tr>
</tbody>
</table>

Source: EIOPA members
For the next six months (see Table 8), four risks are expected to increase, especially the sharp increase of interest rates with a resulting fall in bond prices. This somewhat alleviates the concerns about a prolonged period of low interest rates in which pension funds would face difficulties in earning guaranteed interest rates.

Table 8: Expected risks for the occupational pension funds sector over the next 6 months

<table>
<thead>
<tr>
<th>Pension Funds (based on 16 replies)</th>
<th>Expected development over the next 6 months</th>
</tr>
</thead>
</table>
| ranking based on (probability x impact) | -2 = cons. decrease  
+2 = cons. increase |
| Interest rate risk - sharp increase with a resulting fall in bond prices | 0,4 |
| Property risk | 0,1 |
| Credit risk - Sovereigns | 0,1 |
| Credit risk - Corporates and private households | 0,1 |
| Currency risk | 0,0 |
| Equity risk | -0,1 |
| Liquidity risk | -0,2 |
| Interest rate risk - prolonged period of low interest rates | -0,2 |

Source: EIOPA members

SUPERVISORY REACTIONS AND LESSONS LEARNT FROM THE CRISIS

In light of the economic downturn, the responses of supervisors focused on the flexibility within their frameworks and the different security mechanism available. Due to the severity of the crisis, some countries introduced additional measures such as increasing the length of recovery plans or being more amenable in their structure given the economic environment. In several countries, the measures introduced during the crisis have been in force throughout 2009 and 2010 but the frequency of additional reporting declined noticeably.

Improving the communication with the industry has been considered an essential tool to react to the crisis and to promote key messages through the industry. In the context of DC schemes, supervisory authorities strengthened their communication strategy emphasising the long-term perspective of pension performance mainly in case of weak returns.

The crisis did not have a systemic impact on the EU occupational pension system; the current regulatory and supervisory regime is seen by many as being flexible enough to face the effects of the crisis.

Several supervisors are working, in some cases in close contact with governments and other authorities, to evaluate whether possible changes in the legislation or regulation framework are needed in order to mitigate the procyclical effect of solvency requirements and to improve the risk management of pension funds, avoiding the risk of ad-hoc-changes in the regulation
as a means to artificially minimise the impact of future financial crisis. Some countries are paying significant attention to the management of risks and extreme scenarios and on the better calibration of risk-based reserve requirements.

In DC systems, increasing attention is paid to financial education and to communication to members in order to strengthen the awareness of the risk involved in financial market investments and on the proper investment horizon of investment for retirement. Also, discussions are started around how to better share risks between IORPs/employers/members and to improve design of default options.
<table>
<thead>
<tr>
<th>Country Abbreviation</th>
<th>Country Name</th>
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<tr>
<td>AT</td>
<td>Austria</td>
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<tr>
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Annex 2: Legislative Developments

The regulation of insurance activities was updated with regard to the insurance undertakings’ and brokers’ authorisation in RO, and to procedural rules and evaluation criteria for the prudential assessment of acquisitions and increase of holdings in the financial sector in CZ. In October 2010 SI adopted amendments to the Insurance Act, mainly relating to the operations performed by mutual insurance undertakings, the elections of the representatives to the assembly of these undertakings, and to the rights and obligations of members of mutual undertakings.

Changes have been implemented in the regulation of insurance companies’ investment activities. In this regard NO has widened life insurers and pension funds opportunities to invest in unquoted securities and securities issued by companies that own or operate in infrastructure activities. DE has also started the process of revising its circular on the investments of insurance undertakings, which also applies to Pensionskassen. The Circular highlights the firms’ obligations as regards: (i) a qualified investment management system; (ii) appropriate internal investment rules; and (iii) control procedures. The revision of the Circular includes new provisions regarding the investment in commodities (5% limit) and shareholder loans (Gesellschafterdarlehen).

Connected to the assets eligible to cover technical provisions, IT issued a new Regulation n.36, which implements and renews the provisions already acknowledged by the Italian legislation. The rules widen, under well-established limits, the range of possible assets eligible to cover technical provisions (e.g. participation in buildings societies).

Changes in the field of supervisory reporting systems have been enacted in CZ and FR where the focus was placed on investment holdings, with the intention to obtain more detailed information on the composition of the assets held by each undertaking. In ES rules on statutory reporting were amended to help develop a more complete and accurate framework for the analysis of the solvency condition of entities and market developments.

New principles regarding the valuation of consolidated accounts were introduced in ES during 2010, particularly in the regulation for accountancy of insurance undertakings. The purpose of these changes is to adapt national rules to Regulation (EC) 1725/2003 and Regulation (EC) 1004/2008.

Temporary measures were introduced to Regulation n. 28, issued in 2008 in IT, extending its effects till the year 2010. The regulation allows insurance undertakings (not producing consolidated balance sheets) not to align the balance-sheet value of held for trade financial instruments to the price which can be inferred from the market performance, but to keep it at the most recent book value (semi-annual), provided that: i) the valuation is coherent with the future cash outflow of the undertaking; ii) the difference between such a value and the market value, at each year end date, is classified into a non-distributable reserve.

Against the backdrop of the exceptional turmoil in the financial markets ISVAP issued in March 2011 Regulation n. 37 implementing law n. 10 of February 2011 (which amends the anti-crisis decree n. 185). The decree introduces an optional system, of exceptional and transitional nature, for the
valuation, for supervisory purposes (adjusted solvency calculation), of the government debt issued or granted by EU Member States held for a long period (not for trading purposes) in the asset portfolio of Italian insurance companies. When calculating the adjusted solvency, the insurance company shall be allowed not to take into account the market value of such instruments, but to make reference instead to the book value of those assets, if higher. ISVAP Regulation 37 lays down instructions to implement this anti-crisis law including -among others- a provision which limits the use of the pursued option up to 20% of the adjusted solvency margin as well as the definite involvement of the board of the insurance which decide to adhere to this faculty.

New rules were introduced with reference to the risk management and internal control systems in BG to build up and maintain an information system for risk assessment, management and control, including for the issuance of policies under the compulsory MTPL insurance. New provisions were introduced regarding governance in CZ and IS. IS also published a guidance on risk management to prepare the undertakings for the risk management requirements in Solvency II.

In line with the recommendations by IMF, CEIOPS and IAIS, IT issued regulation n. 36, aiming at bringing a new set of laws into action, in the field of governance, investments management and internal audit (among them the statement which specifically asks for an ad hoc resolution by the Administrative Body with regard to investment policy to be pursued by the company). Furthermore specific limits are included regarding securitisation in order to keep down investment risk. Additionally, DE is in the process of revising its circular on the investment of the restricted assets of insurance undertakings which also applies to Pensionskassen. The circular highlights the obligations on a qualified investment management system, appropriate internal investment rules and control procedures. Finally, it can be mentioned that anti-money laundering and terrorism financing legislation has been implemented in LU.

Some countries introduced new regulations for life insurance contracts to contain the yield of such contracts to sustainable levels, as well as to react to the rapid increase in single premium contracts, by requiring life insurance companies to create separate portfolios for such products, to conduct liquidity planning similar to that of banks and to determine contract duration in advance (FR, DE).

There have also been developments in guaranteed interest rates in the premium formula for life insurance contracts. AT reduced the guaranteed rate for classical life insurance contracts from 2.25% to 2% as of 1 April, 2011; NO lowered the maximum guaranteed rate for new life insurance contracts from 2.75% to 2.5%, with effect from 1 January 2011; DE lowered the maximum interest rate for life insurance companies and “Pensionsfonds” from 2.25% to 1.75% (effective as of 1 January 2012).

Another issue under consideration by NO is the issue of product rules for life insurances and pensions, especially in relation to the formulation of the annual interest rate guarantee, that the introduction of Solvency II has brought into focus. The calculation of capital requirements under Solvency II brings the risk associated with a one-year time horizon considerably more into focus than the present capital requirement.
In PT in 2010, the main regulations issued by Instituto de Seguros de Portugal concerned the areas of advertising and registry of insurance contracts: (i) Regulation number 3/2010, 18 March 2010 set the principles and rules applicable to publicity/advertising by insurance undertakings, insurance intermediaries and pension fund management entities; (ii) Regulation number 14/2010-R, 14 October, regulates the central register of life assurance, personal injury insurance and capital redemption operations. This central register is used to obtain information on the existence of life insurance and personal injury insurance policies or capital redemption operations, in which there is an entitlement of a third party to a payment in case of death of the insured person or the subscriber, as well as the identification of the corresponding insurer and beneficiary; and (iii) through Circular number 12/2010, 23 December, Instituto de Seguros de Portugal issued guidelines regarding reciprocal relationships between insurance undertakings and insurance intermediaries.

In IT, ISVAP Regulation 35 pursues the goal of further strengthening the transparency and the disclosure regime related to insurance contracts in order to protect and help the consumer. Particular attention has been given to insurance contracts linked to mortgages (and other term loans) for which specific mandatory instructions have been implemented, to make it easier for policyholders to switch the provider. In RO, the principles related to the information given to the clients by the insurance undertakings and brokers have been completed. In FR a new decree (n. 2010-40 of 11 Jan 2010) was published on 11 January 2010 on the relationship between life insurance intermediaries and life insurance companies in terms of the content of the information that is provided to the policyholders.

A verdict of the German Federal Administrative Court ruled that private health insurers cannot require higher premiums from existing policyholder that switch between tariffs compared with new policyholders. BaFin was the petitioner of this case and won the trial against a particular private health insurer.

Concerning private health insurance, BaFin informed on 9 December 2010 that the average initial commissions paid to intermediaries increased considerably over the past years. At on-site inspections, BaFin will therefore determine, in more detail, whether risk management practices of insurers are adequate in that respect.

In RO changes were implemented to the professional qualification and continuous training of the personnel working in the insurance business, also in IS the Financial Supervisory Authority (FME) has been working on fit and proper requirements for key persons in insurance undertakings during the year.

In MTPL, an amendment was made to the Act on compulsory insurance, Insurance Guarantee Fund and Polish Motor Insurers’ Bureau, in PL. In RO the main changes were undertaken in the regulatory requirements that are provided in the provisions issued by the Romanian Insurance Supervisory Commission in 2010 dealing with MTPL insurance (authorisation, risks covered, contracts’ duration, reporting losses, paying indemnities, the bonus-malus system); In MT the Companies Act (Incorporated Cell Companies Carrying on Business of Insurance) Regulations 2010 were issued by L.N. 558 of 2010. Insurers carrying on motor business in Malta are no longer required to subscribe to the Motor Insurance Pool as from 1 January 2011. Consequently a number of necessary amendments were made to relevant insurance rules issued under the Insurance Business Act. Motor vehicle license
fees collected by insurance intermediaries, as from 1 January 2011, are being considered as clients monies. Given that insurance intermediaries are required to hold clients monies separately from their own monies, this has required amendments to various insurance intermediary rules. Also, work is currently being carried out on the transposition of the Solvency II framework directive.

**Taxation**

In HU the special tax on financial service providers is expected to decrease the profit of the insurance sector in 2010 and 2011. This is deemed to have a noticeable impact on the solvency position of HU insurers henceforth. In EE, unit-linked products have previously been subject to taxation, that is unit-linked contracts had to be held for 12 years before investment gains were treated as being tax-free. This requirement was removed in August 2010. In addition EE adopted the euro on 1 January 2011 at the rate of exchange of EEK 15.6466 to EUR 1.

Also in BG changes to the tax law were implemented: the Law on the insurance premiums tax became effective as of 1 January 2011. This Law imposes a premium tax of 2% over the insurance premiums for certain classes of non-life insurances.

In FR a new regulation was adopted on 22 December 2010 specifying the fiscal treatment of the "réserve de capitalisation".

**Solvency II preparation**

In addition to the initiatives mentioned above, as a final note, it can be mentioned that during 2010 CY initiated the process of transposing the provisions of the Solvency II Directive into the national insurance companies’ legislation. Also in SK solvency II preparations are underway. Another issue under consideration by NO is that the introduction of Solvency II has brought into focus the issue of product rules for life insurance and pensions, especially in relation to the formulation of the annual interest rate guarantee. The calculation of capital requirements under Solvency II brings the risk associated with a one-year time horizon considerably more into focus than the present capital requirement.
Annex 3: Scope of EIOPA’s pension fund data

The current scope of analysis on the financial conditions and financial stability of the pension fund sector is based on data provided by national competent authorities to EuroStat according to the data definitions prescribed in the Methodological Manual for Pension fund Statistics\(^{55}\). The business statistics on pension funds are developed in the frame of Council Regulation n° 58/97 concerning structural business statistics. This regulation is the main legal reference for the collection, compilation and transmission of EU structural business statistics in the various sectors, including the occupational pension fund sector.

The coverage of the business statistics on pension schemes is generally limited to Pillar II schemes that are linked to a professional occupation. Such schemes usually operate on a funded basis. Moreover, they frequently provide cover for biometric risks (mortality, invalidity and longevity). Occupational schemes are organised either as autonomous pension funds or trusts, non-autonomous pension funds (or book reserve mechanisms) or group life insurance contracts, depending on institutional and traditional differences between Member States.

Autonomous pension funds or trusts are established separately from any sponsoring undertaking or trade. They receive the contributions, invest them and pay retirement benefits. Non-autonomous pension funds mainly refer to the book reserve system. The employer undertakes to pay benefits to his employees and makes provision for commitments on the liabilities side of his balance sheet. In the case of group life insurance contract, the contributions are paid to a life insurance undertaking which invests the contributions and pays the benefits. These schemes are excluded from the pension business statistics as they are already covered by the insurance services statistics.

Likewise, Pillar I compulsory social security schemes and Pillar III individual retirement savings are excluded from the scope as these are not covered by the business statistics on pension schemes. It should be noted that not all Member States of the EEA operate occupational pension provisions. Data availability varies substantially among the various Member States, which hampers a thorough analysis and comparison of the pension market developments between Member States.

**Austria:**
Data includes all occupational pension contributions to Pension Undertakings covered by the Austrian “Pensionskassen Act”. The Pillar II provisions are not compulsory. Contributions cover about 18 per cent of the working population.

**Belgium:**
Pension fund statistics relate to institutions for occupational retirement provisions, i.e. occupational pension funds and so called "pensioenkassen" for the self-employed.

**Bulgaria:**
Pension fund statistics relate to institutions for occupational retirement provisions.

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\(^{55}\) Methodological manual for pension funds statistics ([ISPFS_Oct01_doc14_PF_Manual.pdf](https://example.com)).
**Czech Republic:**
The Czech private pension funds are not occupational based in nature. The beneficiaries can enter in a contract with the pension fund directly regardless of their occupational status.

**Denmark:**
The pensions fund sector in Denmark is very limited. This sector has the size of 1/50 or 2 pct. of the Pillar II sector (the entire occupationally pensions sector) in Denmark. The number of active (working) members in all pension funds in DK is about 7,000 persons and the total amount of assets is approximated EUR 5 billion. Consequently Finanstilsynet in Denmark do not, for the pension fund sector, regularly report to EIOPA.

**Finland:**
Statistics do not include Finnish statutory pension schemes operated by individual undertakings/foundations/funds. Statistics only relate to occupational pension funds by Directive 2003/41/EC.

**Germany:**
The pension funds statistics relate to institutions for occupational retirement provision that fall under the scope of the IORP Directive, i.e. Pensionskassen and Pensionsfonds. Beside these two types of implementing occupational pensions there exist three further types, namely Direktzusage (book reserves), Unterstützungskassen (support funds) and Direktversicherung (direct insurance) that do not fall under the scope of the IORP Directive and are therefore not considered.

**Hungary:**
The data shown for 2008 for Hungary has been based on the mandatory DC private pension funds. These pension schemes are autonomous, DC and operate on a funded basis. Based on the World Bank’s classifications, mandatory pension funds belong to the 2nd pillar.

**Italy:**
Data covers autonomous pension funds related to contractual pension funds, open pension funds (occupational and personal) and pre-existing pension funds (including pre-existing funds whose resources for retirement benefits are held by insurance companies). Data does not cover book reserve schemes and PIP (personal pension schemes implemented through insurance policies).

**Latvia:**
Pension fund statistics relate to private pension funds and cover both occupational and individual pensions.

**Luxembourg:**
There are 2 supervisory authorities in Luxembourg:
The CSSF is the competent authority for pension funds governed by the law of 13 July 2005 relating to institutions for occupational retirement provision in the form of SEPCAVs and ASSEPs and the Commissariat aux Assurances is the competent authority for insurance products as well as pension funds governed by the Grand Ducal Regulation of 30 August 2000.
Pension fund statistics cover pension funds governed by the law of 13 July 2005 relating to institutions for occupational retirement provision in the form of pension savings undertakings with variable capital (SEPCAVs) and pension savings associations (ASSEPs).

Netherlands:
Pension fund statistics relate to all Pillar II institutions for occupational retirement provisions.

Norway:
Pension fund statistics relate to institutions for occupational pensions (so-called "pensjonskasser"), and cover both private and municipal pension funds.

Poland:
Occupational pension schemes operated in Poland cover:
1. occupational pension funds
2. agreements with life insurance undertakings
3. agreements with investment fund undertakings
4. foreign management undertakings
All information included in the pension funds statistics relates only to occupational pension funds. The activity of the occupational pension funds in Poland is based on similar regulations as the open investment funds.

Portugal:
Data include all occupational pension schemes including substitutive funds from the banking and telecommunications sectors established through collective agreements. No figures regarding technical provisions are provided due to the distinctive legal framework under which Portuguese pension funds operate.

Romania:
The statistics refer to the voluntary pensions, regulated by the Law no. 204/2006 regarding the voluntary pensions, as amended and modified (according to the IORP Directive provisions).

Slovakia:
Pension system reforms have introduced mandatory funded occupational pensions as of January 2005.

Slovenia:
Data includes all contributions to pension undertakings, mutual pension funds and contributions collected by insurance undertakings from pension contracts.

Spain:
All the data relates only to occupational pension funds (by Directive 2003/41/EC) which account for about 40 percent of the total pension fund sector. In addition, there are also individual and associated pension funds operated in Spain.
Sweden:
The Swedish pension fund statistics refers to a special form of “friendly societies” and accounts for less than 10 percent of the overall non-state related occupational pensions. The remaining occupational pensions are almost entirely covered by life insurance undertakings and included in the insurance services statistics.

United Kingdom:
Data for the UK mainly relates to schemes covered by the Institutions for Occupational Retirement Provision Directive. Both Defined Benefit and Defined Contribution schemes exist in the UK. Some information from non-IORP schemes and survey-based data has also been included in order to give an indicative view for the UK. Funding level data has been provided from end-of-year estimates by the UK fund established to pay compensations in the event of employer insolvency. Data for 2010 is provided on an estimate and best effort basis.