Financial Stability Report 2012
First half-year report
Introduction
EIOPA’s Financial Stability Committee (FSC) has updated its report on financial stability in relation to the insurance and occupational pension fund sectors in the EU/EEA. The current report covers developments in financial markets, the macroeconomic environment, and the insurance, reinsurance and occupational pension fund sectors as of 4 May 2012 unless otherwise indicated.

Table of contents

1. Summary of main issues and conclusions .......................................................... 4
2. Recent developments .......................................................................................... 5
Financial market developments .............................................................................. 5
Legislative and regulatory developments .......................................................... 14
3. Developments in the European insurance sector ............................................ 15
Insurance sector developments ......................................................................... 15
Local market developments ................................................................................. 18
Supervisory Risk Assessment for the insurance sector ...................................... 19
4. Developments in the European reinsurance sector ........................................ 21
Major loss events in 2011 and at the beginning of 2012 ...................................... 21
Insurance linked securities .................................................................................. 23
Company information ......................................................................................... 24
5. Developments in the European occupational pension fund sector ............... 26
Recent developments – Major policy reforms ...................................................... 26
Structural developments – Assets and contributions .......................................... 26
Financial Developments – Funding levels, asset allocation and returns ............ 31
Supervisory Risk Assessment for the occupational pension fund sector .......... 35
Annex 1: Country abbreviations ........................................................................ 36
Annex 2: Scope of EIOPA’s pension fund data ..................................................... 37
List of figures

Figure 1: Business cycle leading indicators ........................................................................ 6
Figure 2: GDP in 8 selected European countries .............................................................. 7
Figure 3: EUR inflation swap, 5 year ................................................................................ 7
Figure 4: European government bond yields for 8 selected countries – 10 years segment ................................................................. 8
Figure 5: European government bond yields curves for 8 selected countries ............... 8
Figure 6: European short- and long-term benchmark interest rates .................................. 9
Figure 7: European and world equity price indices ......................................................... 10
Figure 8: EuroStoxx Equity Indices .................................................................................. 10
Figure 9: Development of leading European insurance groups’ financial strength: Credit rating distribution .......................................................................................... 11
Figure 10: Development of European insurance ratings outlook distribution ............. 11
Figure 11: Moody’s ratings ............................................................................................. 12
Figure 12: Development of 5-years CDS spreads for senior and subordinated debt for a set of European insurance companies ............................................................................................................. 13
Figure 13: Sovereign CDS spreads .................................................................................. 14
Figure 14: Growth in gross written premiums – life insurance (in %) .............................. 16
Figure 15: Growth in gross written premiums – non-life insurance (in %) ...................... 16
Figure 16: Profitability – life and non-life insurance (in %) .............................................. 17
Figure 17: Combined ratios – non-life insurance (in %) ................................................ 17
Figure 18: Solvency ratios – life and non-life insurance (in %) ....................................... 18
Figure 19: Guy Carpenter Global Property Catastrophe Index (1990=100) ................... 23
Figure 20: Swiss Re Cat Bond Index (Price Index) (2002=100) .................................. 24
Figure 21: Total occupational pension assets (in Million EUR, logarithmic scale) ...... 27
Figure 22: Penetration rates (assets as % of GDP) .......................................................... 28
Figure 23: Gross contributions 2008-2010 (in Million EUR) ...................................... 28
Figure 24: Net cash flows over total assets 2008-2010 .................................................. 29
Figure 25: Allocation of gross contributions 2010 .......................................................... 30
Figure 26: Percentage change in membership levels 2008 – 2010 ............................. 31
Figure 27: Funding levels 2007-2011 .............................................................................. 31
Figure 28: Asset allocations for DB 2008-2010 .............................................................. 32
Figure 29: Asset allocations for DC 2008-2010 or 2007-2009 ....................................... 33
Figure 30: Asset allocations for Hybrid 2008-2010 ...................................................... 33
Figure 31: Sovereign exposure (as % of total assets) 2010-2011 .................................. 34
Figure 32: Percentage return on assets 2009 – 2011 ..................................................... 34

List of tables

Table 1: Classification of most imminent risks for the insurance sector .................. 20
Table 2: The five largest natural catastrophes of 2011, ranked by overall losses .... 21
Table 3: Classification of most imminent risks for the occupational pension fund sector .......................................................... 35
1. Summary of main issues and conclusions

INSURANCE SECTOR

Lately, the relatively positive development of insurers experienced in recent years, has started to reverse. This has shown in solvency ratios as well as profitability and to an extent also premium growth. Though the solvency situation of insurers is only reflected on a Solvency I basis\(^1\) in this report right now, the development of key value drivers (e.g. low yield environment in a number of currency zones in Europe) indicates that the situation also puts significant pressure on market values.

Nevertheless, Solvency I ratios for insurers are still at a comfortable level with \(\sim 200\%\) at the end of 2011. Following up on last report’s risk perception, EIOPA has analysed the sector’s resilience to a possible longer-lasting low interest rate environment as well. Although the sector overall seems to be capable of coping with these challenges for some time, EIOPA continues to monitor the situation closely.

However, if accompanied by other potential threats materialising, the situation might look different, e.g. in case of renewed turmoil due to the failure of governments to stabilise fiscal situations, a strong weighing of these developments on economic growth, or a disruptive unwinding of currency risk (e.g. as a consequence of developments in Greece). While first order effects of such an event on the European insurance sector as a whole seem limited (according to EIOPA analysis conducted), local insurers are likely to suffer and second order effects might also hit other European insurers, though mainly through the potentially triggered disruption of financial markets (e.g. sovereigns, banks and equities).

REINSURANCE SECTOR

In 2011, a large number of very severe natural catastrophes occurred, making 2011 the costliest year ever for the reinsurance sector. The natural catastrophe losses exceeded by far the heavy losses of the previous record year 2005 (with hurricanes Katrina, Rita, Wilma). At the same time, the financial crisis worsened, with interest-rate levels generally remaining low. As a consequence the reinsurance undertakings were confronted with huge challenges regarding both the liability side and the asset side of the balance sheet.

However, at the beginning of 2011 the overall reinsurance industry was very well capitalised. As a consequence the reinsurers dealt well with the challenging environment; the capital reduction was only very modest. Several years of relatively benign payouts as well as the recovery of the financial markets had led to reinsurance capacities substantially in excess of demand.

Altogether, the international reinsurance market remained relatively stable in 2011 and saw only modest price increases at the beginning of 2012. Raising prices largely could not yet be seen in spite of the many natural catastrophes in 2011. The renewals at the beginning of 2012 as well as at April 1 led to some marked increases in reinsurance prices in the regions and segments affected by losses. But overall the rates have gone up only modestly, last but not least due to the extensive absence of major loss events in Europe and North America. Furthermore, there is an increased capital-flow into

\(^1\) It should be noted that different approaches are used in different countries to calculate the technical provisions, e.g. with respect to acquisition costs
the reinsurance market. In the background of the financial crisis investors are searching for relatively safe investments, exerting a moderating effect on the rates.

**OCCUPATIONAL PENSION FUNDS SECTOR**

The members and beneficiaries of Institutions for Occupational Retirement Provisions (IORPs) are currently concentrated mainly in a few Member States, but continue to grow in importance across Europe; in some Member States reforms are in place to foster this growth in the future. A trend is observed towards defined contribution schemes, which leave sponsors less vulnerable to market downturns as risks are borne mainly by members and beneficiaries.

Data for 2011 (provided by supervisors on a best effort basis) document a grave evolution in the funding positions of IORPs, especially for the larger defined benefit (DB) systems such as UK and NL, where levels in 2011 seem to have declined below 100%. The low yield environment in both countries is a key driver behind this development, as it forces the market value of liabilities up. At the same time both systems also result in low expected future asset returns given the dominance of debt investments for most occupational pensions in most countries.

Supervisors have taken actions to address these low funding levels. In NL funds are obliged to participate in a recovery programme as their coverage ratio (assets divided by technical provisions) drops below the required level (on average 120%). The UK pensions regulator is also running recovery programmes and has published a statement in April setting out expectations of trustees of DB IORPs starting valuations under the current conditions. Other recent trends include an increase in sovereign debt exposures of IORPs in 2011 with respect to 2010. At least in high yield countries this is focussing on shorter maturities.

Given current turbulent market conditions, a number of regulators have emphasised the increasing importance of proper governance processes and increasing reporting requirements, also including regular scenario analyses and stress tests.

2. Recent developments

**FINANCIAL MARKET DEVELOPMENTS**

The macroeconomic environment is still challenging in many European countries and thus a main source of concern for financial stability. Unease over government debt levels remains and political uncertainty continues to influence markets also after the relatively strong policy responses at the European level.

Overall, the political and economic climate continues to weigh on growth prospects in Europe, although there are regional differences. Figure 1 shows the evolution of two leading European business cycle indicators for the economic cycles six months ahead. The OECD index shows a somewhat declining trend in macroeconomic output, although possibly at a slower pace than in previous months. The ZEW Eurozone indicator had improved at the beginning of 2012 after having reached levels comparable with those observed during the financial crisis in 2008. The latest figure, however, indicates that the sentiment is again deteriorating slightly.
Figure 1: Business cycle leading indicators

Note: The figure shows leading indicators for the economic cycle six months ahead. Two indicators are depicted. One derives from the ZEW (Zentrum für Europäische Wirtschaftsforschung) Eurozone expectation of economic growth and the other from OECD. The former is plotted in blue on the left-hand axis and the latter is plotted in green on the right-hand axis. The OECD updated its methodology for the calculation of the indicator in April 2012 to use GDP as a reference series.

Several European countries are facing continued economic downturn. Figure 2 shows the development in GDP in several large European countries. Only in a few countries is the GDP back to pre-crisis levels. In several countries, GDP seems to be sloping downwards. Combined with deleveraging by the banking sector in Europe and the fiscal consolidation path followed by major governments, growth prospects for several countries seem dim, at least in the short term. The fact that fiscal consolidation and bank deleveraging is occurring in many countries at the same time increases the disruptive potential of the situation.

At the same time, there is little evidence of inflationary tendencies which might have been expected given the debates at the political level on growth-oriented instruments and global fiscal expansionary policies.

Figure 3 shows that overall inflation expectations are well anchored at around 2% at a five year horizon.\(^2\)

\(^2\) Note that the inflation swap also contains risk premia and is therefore a noisy measure of the true inflation expectation.
Figure 2: GDP in 8 selected European countries

Source: Bloomberg. Fixed prices, indexed to 100 in Q1 2007.

Figure 3: EUR inflation swap, 5 year

Source: Bloomberg

Note: The figure shows the evolution of the rate of the 5 year EUR inflation swap. It is noted that the swap rate is not adjusted for any inflation or other risk premia.

Diverging government bond yields

Combined with high levels of Government debt following the banking crisis which started in 2008, this situation has led European government bond yields to diverge further. Government bond yields are high compared to the last few years for many European countries and several currently show an increasing trend. Figure 4 and Figure 5 show European government bond yields and the yield curves observed by end-April 2012 respectively.
In the autumn of 2008 a period of falling Euro benchmark interest rates was initiated. After hitting a level of 0.6% in August 2010, the 3 months rate subsequently exhibited an increasing trend that, however, seemed to have come to an end during the fourth quarter of 2011 and has decreased notably since then (Figure 6).

While the Euro benchmark 10-year rate displayed an upward moving trend in the first part of 2011, rising from around 2.5% to approximately 3.5%, recent months have again seen the 10Y benchmark rate decline to levels well below 2%. Clearly, long-term rates are of critical importance to life insurers and pension funds, as these institutions typically have long-run obligations to policyholders and pensioners that become more expensive in today's terms when rates are low. Therefore, the financial position of these institutions, in economic terms, typically suffers under such circumstances, in

Figure 4: European government bond yields for 8 selected countries – 10 years segment

Source: Bloomberg
Note: The figure shows the evolution of 10 year government bond yields for selected countries.

Figure 5: European government bond yields curves for 8 selected countries

Source: Bloomberg
Note: The figure shows yield curves for selected countries, observed in April 2012.

Low interest rates
particular where the duration of liabilities exceeds the duration of the corresponding assets. For life insurers, this problem can be even more significant if guaranteed minimal rates of return have been offered to policyholders. Although there is a move by the sector to reduce or adjust the offering of guaranteed returns, many contracts cannot be renegotiated and the sector remains vulnerable to a prolonged period of low interest rates.

Figure 6: European short- and long-term benchmark interest rates

The soft rebound in equity prices that seemed to start during 2009 seemed to come to an end around the middle of 2011 and the last part of the year indeed saw some of the gains reversed. Early 2012 saw some increases and a somewhat improved market sentiment following relatively strong policy responses at the level of the European Union. Importantly, the provision of long-term liquidity by the European Central Bank (ECB) reduced concerns related to bank liquidity and roll-over risk, which also helped to reduce pressure on sovereign bonds. However, stock markets have experienced declines in the recent months and the level of uncertainty is high (Figure 7). European equity levels are still substantially below levels witnessed before the 2008 financial crisis and are again exhibiting a downward sloping trend. The ground gained by equity indices during the recent rally has by now largely been lost. Naturally, this evolution can put pressure on the capital position of insurance companies and occupational pension funds, to the extent that they hold sizeable equity positions in their portfolios.

In line with general market sentiment, equity prices of listed insurance undertakings also decreased over the last few months (Figure 8). Especially for life insurers, the recent decrease can be ascribed to their sizeable holdings of risky assets. A 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.
The financial strength ratings of European insurers experienced more downgrades than upgrades following the financial crisis in 2008 (Figure 9). In 2009, the outlook was somewhat improved, even though perusing the actual migration of ratings the picture was somewhat heterogeneous: both upgrades and downgrades were observed. However, following the recent development, more of the leading European insurance companies are now rated BBB+ or lower than in the previous 4 years. In addition, several companies are on negative outlook (Figure 10). This development is also mirrored in long-term ratings from Moody’s and implied ratings based on CDS and equity data (Figure 11). The latter has shown a relatively sharp decline since 2009.
Figure 9: Development of leading European insurance groups’ financial strength: Credit rating distribution

Source: Standard & Poor’s

Figure 10: Development of European insurance ratings outlook distribution

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 probably reflected concerns about the sustainability of the global financial system. Indeed, the high tail dependence generally thought to exist during periods of depressed market returns between the asset prices of insurers and banks (and within each sector), can be seen as an important factor to consider in the regulation of banks and insurance undertakings. Moreover, although credit spreads did come down substantially after mid-2009 for a broad set of insurance companies, CDS spreads are rising again (see Figure 12). In addition, the spread between the CDS of senior and sub-ordinated debt seems to have increased during the last months (although these two do not represent a primary instrument of financing for insurance undertakings). These evolutions at the level of individual insurance companies coincide with the observed increase in sovereign CDS spreads (see Figure 13).
Figure 12: Development of 5-years CDS spreads for senior and subordinated debt for a set of European insurance companies

Source: Bloomberg
Figure 13: Sovereign CDS spreads

Source: Bloomberg
Note: CDS spreads for the 5-year segment are depicted for selected European Union countries. CDS spreads are averages of price quotes from leading CDS makers. The CDS quotes show trading intentions and it is not necessarily the case that deals are actually struck at the quoted prices. As for all OTC derivatives, spreads may be driven by illiquidity.

It is difficult to assess and quantify the overall detrimental impact the ongoing macroeconomic and financial market turbulence will have on the European insurance and occupational pension fund sectors. However, it is clear that the main risks for the sectors originate from sovereign and banking risks and follow from the potential of adverse market price developments on asset holdings. In particular, a prolonged period of low interest rates following from depressed macroeconomic conditions and reduced equity prices following increased risk aversion and expected economic slowdown will affect the financial resilience of the sectors.

**LEGISLATIVE AND REGULATORY DEVELOPMENTS**

A number of legislative and regulatory developments have been reported by 29 Members and Observers on the basis of an EIOPA survey on national regulatory reforms which have been adopted in the second half of 2011 and the first part of 2012.

The volatility in the capital market and the turbulence experienced in the Eurozone sovereign debt market are perceived as the major thrust of the regulatory and legislative changes reported by most of the responding countries. As a reaction to the impact of sovereign risk on the solvency position of the insurance undertakings, in several countries changes were made in the valuation approach to sovereign bonds (DE, DK, GR, IT).

Supervisory engagement also included increasing the required frequency of reporting of sovereign, banking and other asset class exposures by insurance undertakings and groups (IE, LU, SI).

---

3 AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GR, HU, IE, IT, LI, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, UK.
To deeply explore potential risk concentration areas and market vulnerabilities ad-hoc risk analyses, legislative amendments and reporting requests have been made (BE, FR, IT, PL). The composition of the asset portfolios held by insurance undertakings and the asset allocation policies are closely monitored in many territories (BE, DE, EE, FR, GR, IE, IT, PL, RO) as well as the liquidity position (BE, CY, PT, PL, RO) as a consequence of higher lapse rates.

Likewise inhouse Stress Test exercises were widely performed, or are planned to be conducted in 2012, to assess the insurers’ ability to absorb additional shocks as well as the impacts of relatively large movements in risk factors using new stress test calculations, methodologies or additional adverse financial contexts (EE, FR, FI, LU, NO, PL, CZ). Low-yield valuation exercises are also considered to be a key instrument to be further used to investigate financial weaknesses of the domestic market players.

In this context, and in preparation of 2012 European stress testing, several countries have already launched or are planning to conduct a QIS5bis exercise over the current year.

Following up on the regular and ad-hoc monitoring of the solvency and capital positions of undertakings, more than half of the responding countries reported the need to adopt additional supervisory measures to prevent or solve solvency strains. In few countries a need was seen to put in place targeted actions or to request ad-hoc data (EE, MT, SE) on the basis of concern over the high risk profile of individual companies.

This has broadly led to a review of the annual, quarterly or monthly reporting packages (LU, LI, SE) which in some cases have also been amended or newly implemented to allow an impact assessment of the new prudential requirements to be adopted under the Solvency II framework.

Action plans to gradually implement the new prudential requirements have already been initiated in the observed period (second half 2011- first half 2012) and will be carried out over the year 2012 (DE, LI, MT, FR). These mainly consist in exercises for evaluating the preparedness and affectedness of the industry by SII requirements, supported in some countries by dedicated meetings and by on-site visits carried out as part of the Internal Model pre-application process and of the Solvency II implementation process. Similar programs, started before the observed period, are on-going and broadly performed in many other European jurisdictions.

3. Developments in the European insurance sector

INSURANCE SECTOR DEVELOPMENTS

Overall, the reported data from a sample of large European insurers indicates a slight worsening in profitability and solvency levels while new business is quite sluggish for a significant number of reporting groups.

Life insurance premiums have increased by only 3% on average though more than half of the participating groups reported declining premiums (see Figure 14). While in traditional life insurance, with a guarantee component, premiums declined by around 10% on average, unit-linked life insurance recorded higher premiums (+3%). In non-life business, premiums decreased on average by 2% while more than half of the sample experienced higher premiums. The highest increases in premiums have been seen in ma-
rine/aviation/transport (+24%), while in credit/suretyship premiums shrank by 17%.

*Figure 14: Growth in gross written premiums – life insurance (in %)*

Source: EIOPA, based on worldwide consolidated financial information received from a sample of 24 large European insurance groups from AT, CH, DE, ES, FR, IT, NL, SE and UK (22 groups for 2011 data).

*Figure 15: Growth in gross written premiums – non-life insurance (in %)*

Source: EIOPA, based on worldwide-consolidated financial information received from a sample of 24 large European insurance groups from AT, CH, DE, ES, FR, IT, NL, SE and UK (22 groups for 2011 data).

---

*Slight worsening of profitability*

Overall profits of surveyed groups decreased from 2010 to 2011 – when considering the median group, profits were some 17% lower. Return on equity also decreased (from 9.6% to 7.8% for the median group) though the dispersion especially on the lower end of the distribution was significantly lower in 2011 than in 2010 (see Figure 16).
Though 2011 was characterised by a large number of unusually costly natural catastrophes, profitability of the large non-life insurance groups did not deteriorate: Net claims incurred grew less than net premiums so combined ratios were quite stable. Overall, it declined from 99% to 97%. Also this trend was observed for a majority of surveyed groups.

Solvency positions deteriorated slightly: on average, the solvency ratio has declined from 211% in 2010 to 199% in 2011, though the dispersion within the sample increased.
Figure 18: Solvency ratios – life and non-life insurance (in %)

Source: EIOPA, based on worldwide-consolidated financial information received from a sample of 26 large European insurance groups from AT, CH, DE, ES, FR, IT, NL, SE and UK (20 groups for 2011 data).

LOCAL MARKET DEVELOPMENTS

In addition to the quantitative answers based on the fast-track reporting summarised 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. In spite of adverse market conditions and sluggish economy, life and non-life companies are sufficiently capitalised in terms of solvency ratios following the current regime. A large group of Members reported that solvency ratios in their national markets suffered end-2011 from decreases in market valuation and sovereign debt crisis, however, some insurers have already recapitalised and others announce to do it during the year 2012. Overall, in the majority of the Member States (DE, DK, ES, FR, IT, UK) a stabilisation in the upcoming 6 to 12 months is expected.

In a significant number of Member States a decline in gross premiums in the life sector has been observed recently, primarily due to the sluggish economic activity in some countries. Continued high unemployment also makes it difficult financially for many individuals to purchase new products. In addition, in some Member States the demand for classical life insurance products decreased slightly compared to last year which may be somehow related to the trend in many Member States to marketing towards unit-linked or zero-guarantee products.

While a few Member States report slight improvements in financial results of life and non-life companies, in most Member States, insurers were affected by adverse market conditions, low interest rates and by the sovereign debt crisis. Hence, lower returns on assets due to volatile financial markets, low interest rates, the sovereign debt crisis and the macroeconomic downturn, are highlighted as the main causes for the mixed financial results of the European life and non-life sectors.

In particular, the currently available information pointed out that financial market developments during the second half of 2011 contributed to a dete-
Prioritisation of the solvency situation of the insurers in Europe, however, 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 reported by Members.

As life insurers examine how to reduce the capital strains caused by guaranteed products, the prolonged low interest rate environment will depress the yields for new cash flow and maturing bonds. Therefore there is an increased trend in many Member States (DE, FI, NO, SE, UK) towards marketing unit-linked or zero-guarantee products.

A particular issue pertains to the lapse rates which deteriorate in some of the Member States (AT, BE, FR, IT) which may be somehow related to weak macroeconomic environment. In particular in some Member States were observed higher lapse rates during the last quarter of 2011 but latest information available point out to a decrease (FR) or a stabilisation in 2012 (AT, BE, IT, SE).

In terms of assets held by insurance companies, in a few Member States, insurers determined concentration limits for asset management, reducing exposures to or even banning euro peripheral sovereign. Furthermore, in the majority of Member States most insurers wrote down the value of Greek government bonds in the second quarter. In a large group of Member States there has also been an allocation from peripheral low graded government bonds to higher graded government bonds, equity and high-graded non-financial corporate bonds (DE, FR, UK, FI, NO). Moreover, in a few Member States it is expected that insurers shorten maturities, hold cash and favour liquid assets (FR, IT).

The overarching and somewhat interconnected risk themes, which have been on the economic agenda for some time now, remain mainly 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 euro area economies and following political and macroeconomic risks.

**SUPERVISORY RISK ASSESSMENT FOR THE INSURANCE SECTOR**

As regards the risk themes highlighted by Members, some of the risk factors which are affected more for adverse financial markets conditions and a weaker economic environment are seen now to be more relevant (see Table 1). The risks expected to increase: sovereign, property and credit to corporates and households emerge simultaneously in a sluggish economic environment such as Europe experienced in the past months. Moreover, in an environment where government yields are located at low levels, interest rate guarantees become hard to fulfil. Furthermore, as a result of a weak economic recovery, the remaining economy and industrial enterprises face difficulties, and the average credit rating of governments and industrial corporations would therefore deteriorate. Hence, investment opportunities in lower rated investment vehicles, such as, for example, sub-investment grade bonds, 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. Indeed, macroeconomic conditions indicate that 2012 will likely be another year in Europe of low GDP growth, low interest rates and moderate equity market performance. Even if the economic recovery continues, insurers may find that the assets underpinning their balance sheets have decreased in value.

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 2011 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 this Spring Report is primarily focussed on market and credit risks.

Based on the responses from 29 Member States, 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, equity risk, low interest rates as well as credit risk of banks 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.

Table 1: Classification of most imminent risks for the insurance sector

<table>
<thead>
<tr>
<th>Insurance (based on 29 replies)</th>
<th>Average</th>
<th>Average</th>
<th>Developmen</th>
<th>Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>probability of risk</td>
<td>impact of risk</td>
<td>t over the</td>
<td>developmen</td>
</tr>
<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>Credit risk - Sovereigns</td>
<td>2,82</td>
<td>2,75</td>
<td>0,2</td>
<td>0,3</td>
</tr>
<tr>
<td>Equity risk</td>
<td>2,82</td>
<td>2,29</td>
<td>0,5</td>
<td>0,1</td>
</tr>
<tr>
<td>Interest rate risk - prolonged period of low interest rates</td>
<td>2,64</td>
<td>2,61</td>
<td>0,2</td>
<td>-0,1</td>
</tr>
<tr>
<td>Credit risk - Banks</td>
<td>2,56</td>
<td>2,89</td>
<td>0,2</td>
<td>0,2</td>
</tr>
<tr>
<td>Credit risk - Corporates and private households</td>
<td>2,43</td>
<td>2,11</td>
<td>0,2</td>
<td>0,3</td>
</tr>
<tr>
<td>Property risk</td>
<td>2,11</td>
<td>1,93</td>
<td>0,3</td>
<td>0,3</td>
</tr>
<tr>
<td>Natural catastrophes</td>
<td>1,92</td>
<td>2,40</td>
<td>0,0</td>
<td>0,0</td>
</tr>
<tr>
<td>Currency risk</td>
<td>1,86</td>
<td>1,61</td>
<td>0,0</td>
<td>0,1</td>
</tr>
<tr>
<td>Liquidity risk</td>
<td>1,82</td>
<td>2,14</td>
<td>0,3</td>
<td>0,0</td>
</tr>
<tr>
<td>Interest rate risk - sharp increase with a resulting fall in bond prices</td>
<td>1,71</td>
<td>2,46</td>
<td>0,1</td>
<td>0,1</td>
</tr>
</tbody>
</table>

Source: EIOPA members, data collected until mid-May 2012.

Over the last six months eight of the 10 risks mentioned above have increased according to the feedback of national supervisors. The highest increases are reported with regard to equity risk, property risk and liquidity.

---

4 AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GR, HU, IE, IT, LI, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, UK.
risk. On the contrary, natural catastrophes and currency risk are considered to be stabilised compared with data from six months ago.

For the next six months three risks are expected to increase further, due to turbulences in the financial markets and as a consequence of a sluggish economy, e.g. credit risk on sovereigns, property risk and credit risk to corporates and households. Conversely, interest rate risk related to a prolonged period of low interest rates is expected to decrease slightly.

4. Developments in the European reinsurance sector

MAJOR LOSS EVENTS IN 2011 AND AT THE BEGINNING OF 2012

The year 2011 has set new records. At about USD 380bn, global economic losses far surpassed 2005, the previous record year with losses of USD 220bn and make 2011 a year of unprecedented losses. Original insured losses totalled USD 105bn, slightly more than 2005’s USD 101bn (in original values).

The most destructive loss event of the year 2011 was the devastating earthquake of 11 March in Tohoku, Japan, which alone (including the tsunami and without considering the consequences of the nuclear accident) accounted for overall losses of USD 210bn and insured losses of about USD 35bn-40bn. It was the costliest natural catastrophe of all times and the strongest earthquake (magnitude of 9.0) ever recorded in Japan. The earthquake was also the most severe natural catastrophe in 2011 relating to fatalities: 15,840 people were killed, roughly more than the half of all people who have been victims of natural catastrophes in 2011. However, the figure does not include the countless people who died as a result of the famine following the worst drought in decades on the Horn of Africa, which was the greatest humanitarian catastrophe of the year 2011.

The second most expensive natural catastrophe in 2011 for the insurance industry was again a very severe earthquake. On 22 February, New Zealand’s second largest town, Christchurch, was partly destroyed by an earthquake with a magnitude of 6.3, which caused insured losses of about USD 13bn and overall losses of roughly USD 16bn.

Table 2: The five largest natural catastrophes of 2011, ranked by overall losses

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Region</th>
<th>Fatalities</th>
<th>Overall losses USD bn</th>
<th>Insured losses USD bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.03.2011</td>
<td>Earthquake, tsunami</td>
<td>Japan</td>
<td>15,840</td>
<td>210</td>
<td>35-40</td>
</tr>
<tr>
<td>1.8-15.11.2011</td>
<td>Floods, landslides</td>
<td>Thailand</td>
<td>813</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>22.2.2011</td>
<td>Earthquake</td>
<td>New Zealand</td>
<td>181</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>22-28.4.2011</td>
<td>Severe storms/tornadoes</td>
<td>USA</td>
<td>350</td>
<td>15</td>
<td>7.3</td>
</tr>
<tr>
<td>22.8-2.9.2011</td>
<td>Hurricane Irene</td>
<td>USA, Caribbean</td>
<td>55</td>
<td>15</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: Munich Re, NatCatSERVICE.

These two large earthquakes were responsible for making geophysical events the dominant loss drivers in 2011. Nearly two-thirds of economic losses and about half the insured losses stemmed from geophysical events. The long-term average contribution of geophysical events has been just

---

22% of the economic losses and only 10% of the insured losses. So 2011 was exceptional not only due to its extraordinarily high losses, but also because of significant deviations of the distribution of the losses to the different perils.

Since the hurricane season was relatively harmless the storm-related insured losses reached only 37% of all insured losses in 2011 compared with 76% in the long-term average. Again, unusually, more than 50% of all insured storm losses stemmed from devastating thunderstorms and tornado outbreaks in the USA which accounted for an absolute record of insured losses of about USD 26bn.

A further record in 2011 represents the flooding in Thailand. With overall losses of about USD 40bn and insured losses of about USD 10bn the flooding in Thailand was not only by far the country’s most expensive catastrophe to date, but also the world’s most expensive flood disaster. A prominent role played the increased importance of Thailand regarding the global manufacturing supply chains. A large number of key component manufacturers were affected by the flooding, leading to production delays and disruptions at client businesses. As a consequence insured losses caused by production disruptions soared up.

So, despite the dominant geophysical events in 2011, the weather-related events in total were also very severe, leading to the second-highest values recorded since 1980 in terms of overall and insured losses (in 2011 currency units). Even without the earthquakes, 2011 would have been an extreme natural catastrophe year.

Moreover, the distribution of insured losses between the continents in 2011 was also exceptional. Asia accounted for 44% of all insured losses, whereas North America and Europe together accounted for fewer than 40% in 2011 contrary to the long-term average of more than 85% of all insured losses. The absence of major loss events in the Western developed countries with a high insurance density left the insured losses in relation to the overall losses at a low level and is one major reason why overall the rates only increased relatively modest in spite of the heavy losses in 2011.

By contrast, loss activity during the first three months of 2012 has been relatively light. Insured losses during the quarter are expected to be less than USD 5bn, significantly lower than losses of over USD 50bn in the first three months of 2011. The sinking of the cruise ship Costa Concordia, regional tornado outbreaks in the US and earthquakes in Mexico and Chile were the most significant losses that occurred in the first quarter of 2012.6

Despite the heavy losses of 2011, the reinsurance market continues to function normally and has sufficient capital. At the end of 2011, the reinsurance capacity was only three percent under the level of 2010.7 The renewals in January and April reveal that sufficient capacity was available in the market in spite of the heavy losses and the challenging macroeconomic environment (particularly low investment yields and increased investment volatility). Several years of relatively benign payouts as well as the recovery of financial markets had led to reinsurance capacities substantially over the demand, which depressed the prices.

Consequently the rates did not rise largely, which is very different from other post-loss markets. There are, of course, some marked increases in reinsurance prices in the regions and segments affected by losses, especially regarding the Asia-Pacific region. But overall the rates have gone up only

---

modestly, last but not least due to the extensive absence of major loss events in Europe and North America. Particularly the demand for reinsurance in the US, where reinsurance demand far exceeds that of any other region, continues to be very sensitive to price. The 2011 hurricane season was relatively harmless. The model version changes (RMS v.11) were often already reflected in underwriting processes to varying degrees based on previous loss experience with the result of a less increased demand for reinsurance than expected earlier.  

Considering the casualty lines the reinsurance prices continued to be subdued. Most other lines also saw moderate price changes, with increases and decreases in the single digits. Altogether, the reinsurance price level rose modestly at the beginning of 2012 but a sharp and sustainable increase in reinsurance price is still missing.  

(Figure 19)

**Figure 19: Guy Carpenter Global Property Catastrophe Index (1990=100)**

![Guy Carpenter Reinsurance Price Index](chart.png)

Source: Guy Carpenter

In the reinsurance market, it is all about the supply and demand of capacity. But a material new demand for traditional reinsurance or a capital tightening is not expected. To the contrary, there is an increased capital-flow into the reinsurance market. In the background of the financial crisis investors are searching for safe investments with a depressing effect on the rates.

**INSURANCE LINKED SECURITIES**

The increased capital-flow into the reinsurance market can also be observed by looking on the Insurance-Linked Securities (ILS) market. The first quarter of 2012 was the most active on record for new catastrophe bond issuance. Nine catastrophe bonds were successfully closed, providing USD 1.5bn of new capital to sponsors. In 2011, the first quarter accounted for just one billion USD and the whole year accounted for roughly USD 4.6bn.

---

Given the first total loss of three ILS within a year the increased volume of CAT bond issuance is astonishing. The USD 300m Muteki Ltd. catastrophe bond issued in 2008 by Munich Re on behalf of Japanese cooperative Zenkyoren was triggered by the devastating Japanese earthquake and became a total loss.\textsuperscript{11} Later that year, two tranches of the Mariah Re Ltd. (Series 2010-1 and 2010-2) of totally USD 200m sponsored by American Family Mutual Insurance were triggered by severe thunderstorms and tornadoes in the US and became a total loss too.\textsuperscript{12} (Figure 20)

\textbf{Figure 20: Swiss Re Cat Bond Index (Price Index) (2002=100)}

![Swiss Re Cat Bond Price Index](image)

Source: Bloomberg

Since the CAT bond market did function well after the three total losses and does continue to function, 2011 and beginning of 2012 was apparently a successful test for the CAT bond market. As the expected CAT bond issuance volume for the second quarter is far more than a half billion USD, the further increase of the market seems to be quite likely. Although the CAT bond market is a niche in comparison with the overall securities market and small in comparison with the overall reinsurance market, it is of significant size in comparison with the property-catastrophe reinsurance market.

\textit{COMPANY INFORMATION}\textsuperscript{13}

In the following the performance of selected European reinsurers in 2011 and their struggle with the enormous challenges of that year will be highlighted.

\textbf{Munich Re}

The world´s biggest reinsurer Munich Re concluded the financial year 2011 with a consolidated net profit of EUR 702m. This is roughly 30% of the previous year´s profit. The technical result dropped by about 85% to EUR 286m in 2011 mainly due to higher major catastrophe losses in the

\begin{itemize}
  \item \textsuperscript{11} See Artemis: \url{http://www.artemis.bm/blog/2012/01/06/zenkyoren-loss-creep-makes-muteki-loss-seem-small-by-comparison/}.
  \item \textsuperscript{12} See Artemis: \url{http://www.artemis.bm/blog/2012/01/11/sp-downgrades-mariah-re-2010-1-notes-on-loss-payment/}.
  \item \textsuperscript{13} Data from annual reports and press releases.
\end{itemize}
reinsurance segment. The combined ratio (CR) of the reinsurance segment rose significantly from 100.5% in the previous year to 113.6% in 2011, despite a marked increase of the gross written premiums (GWP) by 12.3% up to about EUR 26.5bn. Overall, the GWP including the primary insurance increased in 2011 by nearly 9% to about EUR 49.6bn. The non-technical profit declined remarkably by 55.6% to roughly EUR 0.9bn mainly due to higher write-downs as a result of the financial disturbance. Expenses for write-downs to market values as at the end of 2011 on Greek government securities alone totalled EUR 1.2bn, impacting the consolidated result with EUR 232m. The operating result dropped in 2011 by roughly 70% to about EUR 1.2bn. However, Munich Re has still a comfortable capital buffer. The adjusted solvency ratio diminished from 260.5% in the previous year to 245.3% in 2011.

Swiss Re

The Group net income of the world’s second biggest reinsurer Swiss Re rose strongly in 2011 by nearly a third to USD 2.6bn. The Group benefited from a low tax rate, which fell from 20.2% in the prior year to 2.7% in 2011. The exceptional accumulation of natural catastrophe events is manifested in the non-life reinsurance operating result which declined by 48.1% to USD 1.3bn. That implies also reserve releases of around USD 1.3bn due to a favourable development of prior accident years. The CR increased to 101.6% (2010: 93.9%). The Group net investment income including the net realised investment gains declined to about USD 5.9bn (2010: USD 8.2bn). Exposure to Greek sovereign debt was zero over the entire year. The GWP rose in 2011 by 8.4% to USD 21.3bn.

Hannover Re

The Group net income of Hannover Re amounted in 2011 to EUR 606m, a decline of about 19% in comparison with the previous year. Given the second-highest value in the company’s history in terms of net burden of major losses resulting in a deteriorated CR of 104.3% (2010: 98.2%) for the non-life reinsurance segment the financial result is remarkable. The Group’s profit benefited from the refund of excess taxes and interest paid thereon in an amount of EUR 128m as well as from a very good investment income. In 2011, Hannover Re was not invested in Greek government securities. The GWP rose by 5.8% to about EUR 12.1bn.

SCOR

French biggest reinsurer SCOR concluded the financial year 2011 with a consolidated net income of EUR 330m. That implies a decline by more than 20% in comparison with the previous year. Again, the non-life reinsurance segment incurred higher losses due to the catastrophes. The technical result of the segment dropped to EUR 66m (2010: EUR 249m). The CR worsened from 98.7% in the previous year to 104.5% in 2011. In total, natural catastrophes impacted the Group’s net combined ratio by 18.5 points. The total investment income decreased in 2011 by 6.1% to EUR 665m. Due to the acquisition of Transamerica Re, the GWP increased appreciably by 13.6% to EUR 7.6bn.

Lloyd’s

In 2011, the insurance market Lloyd’s of London endured the costliest year for natural disasters in its 324-year history and incurred a pre-tax loss of EUR 619m. Total catastrophe claims ran to EUR 5.3bn – more than doubled the previous year’s total. As a consequence the CR deteriorated from 93.3% in the previous year to 106.8% in 2011. The CR of the reinsurance segment even deteriorated to 130.6% (2010: 90.3%) resulting in a technical loss of about GBP 1.9bn. The GWP (only reinsurance) increased by 5.5% to approximately GBP 8.8bn.
5. Developments in the European occupational pension fund sector

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 (e.g. CZ, HU, MT). Furthermore, in other countries such as DK, FI, FR and SE the main part of occupational retirement provision is treated as a line of insurance business respectively held by life insurers, and is therefore also not covered in this section.

Please note that data collected for 2011 has provided EIOPA with an approximate view of the financial position of occupational pension funds at the end of 2011. 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

The entire occupational pensions sector in Europe is experiencing a large number of regulatory changes and will continue to do so in the short to medium term.

Recent highlights include IT having seen major reforms in the public pension space which might impact the occupational and private pension pillars and the UK where the auto enrolment of workers into a qualifying pension scheme will be introduced later this year.

Several reforms and related initiatives have also been reported on the following two broader topics: (1) governance around risk and asset management (e.g. IT, PT), and (2) enhanced transparency and reporting requirements (e.g. AT, DE, ES, PT).

STRUCTURAL DEVELOPMENTS – ASSETS AND CONTRIBUTIONS

ACCUMULATED ASSETS

Measured by the absolute size of occupational pension assets, the European sector is very concentrated with the UK and NL together making up for the vast majority of the overall assets. Due to the variance in absolute asset levels, a logarithmic scale has been chosen for Figure 21. However, this disguises noticeable drops in asset levels experienced in a few countries in 2011 (e.g. ES, PT where the main driver of this drop was a transfer of responsibilities from private pension funds to Social Security).

All following graphs will use the country order by total assets of occupational pension funds as displayed in Figure 21.
Figure 21: Total occupational pension assets (in Million EUR, logarithmic scale)

(Note: UK figures relate to DB schemes only. For BE, IS, LI, LU, SI and GR, data was partially not available. For BG, 2009 assets were below 1 MN EUR.)
Source: EIOPA

The penetration rate being 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. Figure 22 shows that for most countries covered here, the occupational pension penetration rates have recovered from the dip in 2008, i.e. 2010 rates surpassed 2007 levels. Exceptions include ES, PT, SE and IS. Reasons for the development in PT have been given above.

The size of occupational pension funds is to a large extent related to their time of enactment and labour market coverage which is also closely linked to the attractiveness of public pension arrangements. Accordingly, countries such as the UK and NL with a relatively long history of occupational pension provision and relatively low public pension replacement rates see total assets representing a high portion of GDP. In other countries, such as some continental European countries, traditional public sector pensions or other similar national arrangements can play a dominant role in the retirement system. 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 (non-funded) public systems.
For some countries, the relatively small size of the occupational pension fund sector shown can be also explained by the fact that they are mainly relates to IORPs (see Annex 2), while occupational pension benefits may also be provided through other mechanisms such as insurance contracts (e.g. DK, FI, FR and SE).

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 absolute contributions for 2008 to 2010. Countries that have seen falling contributions in 2010 include NL, ES and PT. Increases were for instance reported from UK, DE and AT.

(Note: For LI, SI, SK, LV, PL, RO, BG figures are below 500 MN EUR. For IS, 2010 data were not available. Year-end exchange rates have been used for non-Euro countries. So changes in exchange rates might drive some of the shown developments in those countries.)

Source: EIOPA
Occupational pension schemes in the developing European sector experience the strongest relative growth measured as net cash flow over total assets (see Figure 24). However, over the past three years relative growth has been slowing down in this sector.

Figure 24: Net cash flows over total assets 2008-2010

(Note: For IS, LI and LV, 2010 data was not available. For the UK, the figures could not be computed exactly as contributions and assets were not available on the same base, however, net cash flows over total assets are slightly negative there for the entire market including DB and DC.)

Source: EIOPA

DEFINED BENEFIT VS. DEFINED CONTRIBUTION SCHEMES

Figure 25 shows the allocation of contributions towards DB, DC or Hybrid schemes for 2010. In the majority of the countries with large pension sectors, DB schemes still dominate the occupational pension's landscape. However, in some of these countries a shift away from traditional DB schemes has already started or is expected to start as sponsors are increasingly choosing to replace these and share a number of the risks with members or to set up DC plans instead. One example is the UK, where a majority of DB schemes are closed for new members. In 2011, only 16% of UK DB schemes were reported completely open down from 31% in 2008.

In the smaller IORP markets in CEE, DC schemes are dominating.
The 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.

**IORP MEMBERSHIP**

In general across Europe, EIOPA see the membership of IORPs growing. Figure 26 shows the change in membership numbers from 2008 to 2010. In many Member States, there has been a significant increase over this time period, most notably in AT and RO. In AT, the increase was mainly driven by civil servants switching to the pension fund regime though.

Some structural trends are under way including the above mentioned shift towards DC and the rising numbers of pensioners in most Member States. There also continue to be concerns over the decisions taken by some countries to transfer the retirement savings from private pensions to pay-as-you-go systems. This move 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.

Finally, a consolidation process of the occupational pension fund sector is underway. Some countries have reported a declining number of IORPs, e.g. NL were the number of IORPs declined from 514 down to 454 in 2010 and 2011. Other countries experienced IORPs closures and mergers in the past two years, including DE, NO, PT and UK.
**FINANCIAL DEVELOPMENTS – FUNDING LEVELS, ASSET ALLOCATION AND RETURNS**

**AVERAGE FUNDING LEVELS**

Given the recent low yields in a number of European countries which put significant pressure on DB liabilities valued to market, funding levels have suffered in the past months. Cover ratios in the UK and NL, the two countries with the largest pension sectors, are estimated to have fallen below 100% in 2011.

(Note: Data for 2011 is very preliminary and often survey-based so should not be read as a definitive view of 2011. No recent data available for IS, LI and SI.)

Source: EIOPA
In practice, Member States use different methods and assumptions to determine inputs into the funding levels, i.e. caution is required when making comparisons across countries. Most countries displayed in Figure 27 are applying market consistent approaches though, apart from SI.

In situations where funding levels fall below thresholds set by national supervisors, recovery plans come into action to get the levels back up. As a consequence of the crisis in 2008, 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 some cases the measures taken also implied a reduction of benefits for pension participants (AT, NL) or the removal of the indexation of benefits for some time (NL).

**ASSET ALLOCATION**

Figure 28 to Figure 30 show the aggregate asset allocations across countries for 2008 to 2010 for DB, DC and Hybrid schemes separately. Figure 28 indicates that asset allocation strategies for DB schemes have been relatively stable in recent years in each of the different countries. Debt and Fixed Income investments remain the dominating asset class in most countries covered here. For some countries equities make up a significant share of overall investments, including the UK with ~40%, NL with ~35% and NO and PT with ~15% each.

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 80% in SK). Overall, relative equity exposures seem to have increased rather than declined in a number of countries in recent years.
Following survey results on a best effort basis, occupational pension funds (comprising DB, DC and Hybrid) in a number of Member States have increased their relative Sovereign bond exposures in 2011 (see Figure 31). Though limited transparency as to the types of sovereign bonds exists at this moment, the general assumption is that it is largely home country exposures.

Furthermore, average maturities of Sovereign debt seem to have fallen significantly in some countries, e.g. in PT Sovereign Portuguese debt holdings with maturities below 2 years increased from 10% (of total Portuguese public debt) on June 2007, to 33% on June 2011.

It should be noted that for some countries with relatively low sovereign exposures this might also be related to the fact that supply of the instruments is limited at times (e.g. as indicated by SE).
Figure 31: Sovereign exposure (as % of total assets) 2010-2011

(Note: For AT, 2010 data was not available. Data reported on a best efforts basis. Market-consistent valuation approaches applied apart from DE, RO and SI.)
Source: EIOPA

ASSET RETURNS

Figure 32 gives an estimate of the rate of return on assets for all schemes from 2009-2011. After having recovered from significant decline in asset returns in 2008, 2011 was another challenging year with respect to investment returns. Several countries report overall negative 2011 returns on the occupational pension schemes, key drivers being trends laid out in the financial markets section of this report including partially low yields, sovereign debt turbulences and volatile equity markets.

Figure 32: Percentage return on assets 2009 – 2011

(Note: For some countries, 2011 data was not available. 2011 data on best efforts basis.)
Source: EIOPA
SUPERVISORY RISK ASSESSMENT FOR THE OCCUPATIONAL PENSION FUND 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 occupational pension funds sector. Based on the responses from 19 national supervisory authorities\(^\text{14}\), 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 3).

Main risk is sovereign risk

Sovereign risk, equity risk and potential bank credit issues or defaults are the risks with the highest overall ranking.

Table 3: Classification of most imminent risks for the occupational pension fund sector

<table>
<thead>
<tr>
<th>Occupational Pension (based on 19 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>-2 = cons. decrease</td>
<td>-2 = cons. decrease</td>
</tr>
<tr>
<td></td>
<td>2 = medium-low</td>
<td>3 = medium-high</td>
<td>+2 = cons. increase</td>
<td>+2 = cons. increase</td>
</tr>
<tr>
<td></td>
<td>3 = medium-high</td>
<td>4 = high</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit risk 2 - Sovereigns</td>
<td>2.7</td>
<td>2.8</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Equity risk</td>
<td>2.9</td>
<td>2.5</td>
<td>0.5</td>
<td>0.2</td>
</tr>
<tr>
<td>Credit risk 3 - Banks</td>
<td>2.5</td>
<td>2.6</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Interest rate risk 1 - prolonged period of low interest rates</td>
<td>2.7</td>
<td>2.4</td>
<td>0.2</td>
<td>-0.1</td>
</tr>
<tr>
<td>Longevity</td>
<td>2.0</td>
<td>3.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Interest rate risk 2 - sharp increase with a resulting fall in bond prices</td>
<td>1.7</td>
<td>2.6</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Credit risk 1 - Corporates and private households</td>
<td>2.3</td>
<td>1.9</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Property risk</td>
<td>2.1</td>
<td>1.8</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Currency risk</td>
<td>2.1</td>
<td>1.7</td>
<td>-0.1</td>
<td>-</td>
</tr>
<tr>
<td>Liquidity risk</td>
<td>1.7</td>
<td>1.8</td>
<td>0.2</td>
<td>-0.1</td>
</tr>
</tbody>
</table>

(Note: Increases in values compared to last report are marked in red)
Source: EIOPA

\(^{14}\) AT, BG, DE, ES, GR, HU, IT, LI, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK.
### Annex 1: Country abbreviations

<table>
<thead>
<tr>
<th>Country Code</th>
<th>Country Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>Austria</td>
</tr>
<tr>
<td>BE</td>
<td>Belgium</td>
</tr>
<tr>
<td>BG</td>
<td>Bulgaria</td>
</tr>
<tr>
<td>CY</td>
<td>Cyprus</td>
</tr>
<tr>
<td>CZ</td>
<td>Czech Republic</td>
</tr>
<tr>
<td>DE</td>
<td>Germany</td>
</tr>
<tr>
<td>DK</td>
<td>Denmark</td>
</tr>
<tr>
<td>EE</td>
<td>Estonia</td>
</tr>
<tr>
<td>ES</td>
<td>Spain</td>
</tr>
<tr>
<td>FI</td>
<td>Finland</td>
</tr>
<tr>
<td>FR</td>
<td>France</td>
</tr>
<tr>
<td>GR</td>
<td>Greece</td>
</tr>
<tr>
<td>HU</td>
<td>Hungary</td>
</tr>
<tr>
<td>IE</td>
<td>Ireland</td>
</tr>
<tr>
<td>IS</td>
<td>Iceland</td>
</tr>
<tr>
<td>IT</td>
<td>Italy</td>
</tr>
<tr>
<td>LI</td>
<td>Liechtenstein</td>
</tr>
<tr>
<td>LT</td>
<td>Lithuania</td>
</tr>
<tr>
<td>LU</td>
<td>Luxembourg</td>
</tr>
<tr>
<td>LV</td>
<td>Latvia</td>
</tr>
<tr>
<td>MT</td>
<td>Malta</td>
</tr>
<tr>
<td>NL</td>
<td>Netherlands</td>
</tr>
<tr>
<td>NO</td>
<td>Norway</td>
</tr>
<tr>
<td>PL</td>
<td>Poland</td>
</tr>
<tr>
<td>PT</td>
<td>Portugal</td>
</tr>
<tr>
<td>RO</td>
<td>Romania</td>
</tr>
<tr>
<td>SE</td>
<td>Sweden</td>
</tr>
<tr>
<td>SI</td>
<td>Slovenia</td>
</tr>
<tr>
<td>SK</td>
<td>Slovakia</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>CH</td>
<td>Switzerland</td>
</tr>
</tbody>
</table>
Annex 2: 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. 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.

**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 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. The mandatory private pension funds don’t fall under the scope of the IORP Directive. Since 2010 the regulation of this pillar has been transformed fundamentally and 97 % of the members returned to the 1st state pillar.

**Italy:**
Data covers autonomous pension funds related to contractual pension funds, open pension funds (occupational and personal) and autonomous 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 au-
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 pension 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 fund statistics relates only to the privately managed voluntary DC pension system (3rd pillar) supplementing publicly managed PAYG system and retirement pension savings (2nd pillar).

**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. Data sources include statistics collected by the Office for National Statistics (MQ5), 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 Pension Protection Fund based on S179 funding.