

4. The European pension funds sector

The European occupational pension fund (PF) sector is negatively affected by the prolonged low yield environment and the funding sustainability of the sector remains under pressure. Traditional Defined Benefit plans (DB) are primarily affected as they provide employees with a pre-defined level of pension. DB funds are long-term investors, whose liabilities have a longer duration than the assets, potentially leading to long-term asset-liability mismatches that may be greater than those experienced in the insurance sector. Defined contribution funds (DC) have also been affected by the low interest rate environment but in a different way. Since they do not have a strict liability structure they adjust instantly to macroeconomic developments.

The results of the recent EIOPA IORP Stress Test conducted in 2017 revealed a substantial funding gap in some countries and suggests that risks from pension sectors could spill-over to the real economy via impact on sponsors or benefit reductions, in particular in countries with significant funding gaps and large pension fund sectors. Hence, a regular risk assessment of the sector is needed. This could be done via EIOPA stress test exercises, which are conducted on a bi-annual basis. A common methodology is developed and applied in order to tackle the issue of heterogeneity in reporting regimes of different member states. However, more elaborated and less resource intensive assessment is needed on a frequent basis in order to effectively monitor and analyse the situation of the European occupational pensions sector, to highlight potential gaps and corresponding risks as well as to provide advice on required actions.

Therefore, EIOPA has revised its regular information requests regarding occupational pensions data towards NCAs and will receive more consistent and granular data from Q3 2019 onward (EIOPA-BoS-18-114, published 19 April 2018).³⁷ Through this key set of high quality, consistent information and more frequent reporting, EIOPA and the national authorities are better prepared to identify risks and take informed policy decisions regarding the pension sector. After the launch of the public consultation in 2017, the new reporting templates were published in April 2018.

4.1. Key developments

Total assets held by occupational pension funds increased for both the EEA and the EA during 2017 by 6 percent and 5 percent, respectively (Figure 4.1).

In 2017, the European IORPs sector manages EUR 3.8 trillion of assets. The largest IORPs markets, the UK and the NL, increased their total assets by 7 percent and 5 percent, respectively.

The UK and the Netherlands account for about 82 percent of the European occupational pensions sector (Table 4.1). Cross-country differences of the importance of the sector are mainly driven by the relative share of private and public pension provision, with both UK and NL providing its citizens with relatively modest flat-rate state pensions under Pillar 1 and mostly mandatory pension saving through pension funds under Pillar 2. Pension funds under Pillar 1 are not covered in this chapter.

³⁷ <https://eiopa.europa.eu/Pages/News/EIOPA-is-significantly-enhancing-European-pensions-statistics.aspx>

Table 4.1: Total assets per country as a share of total assets reported for 2017

UK	NL	DE	IT	IE	ES	NO	IS	BE	AT	SE	PT	RO
46.4%	35.8%	5.5%	3.5%	2.6%	1.0%	0.93%	0.86%	0.86%	0.59%	0.54%	0.49%	0.24%
DK	LI	FI	LU	SK	GR	SI	PL	LV	HR	BG	HU	MT
0.20%	0.17%	0.11%	0.04%	0.051%	0.035%	0.019%	0.012%	0.012%	0.0032%	0.0002%	0.0001%	0.0001%

Source: EIOPA

Note: Data is preliminary and subject to revisions. For the UK data refers only to DB and HY schemes.

The penetration rate of the occupational pension fund sector remained stable in 2017 (29 percent for EEA and 23 percent for the EA). This ratio is calculated as the total size of assets over GDP and gives an indication of the relative wealth accumulated by the sector. In most of the countries penetration rates did not change significantly (Figure 4.2). The highest increase was observed in the UK (+7 per cent), in IS (+4 per cent) and in the NL (+2 per cent). Penetration rates vary a lot across European countries as in some countries the IORP sector is particularly large, whereas in others it is still non-existent or just starting to be established.

Figure 4.1: Total Assets (in EUR trn)

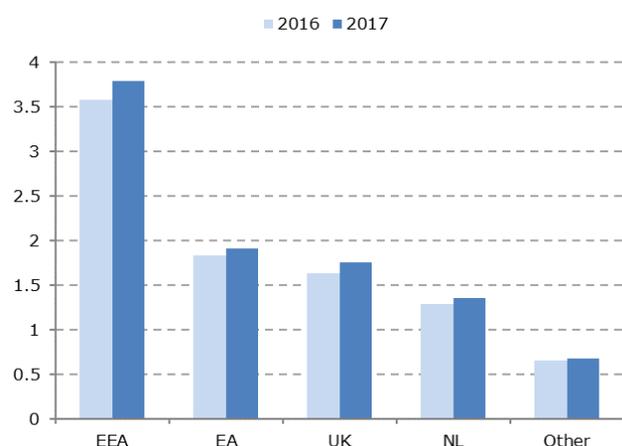
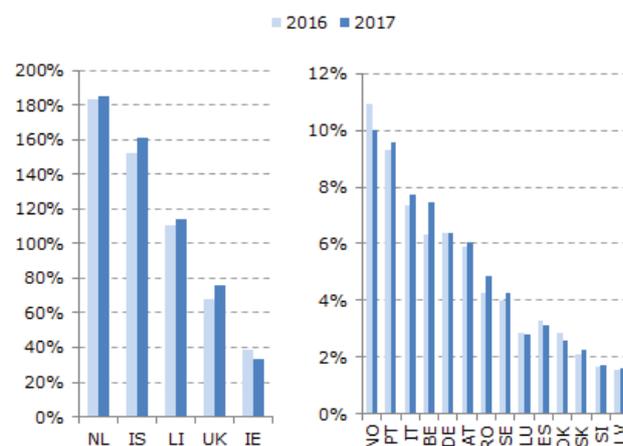


Figure 4.2: Penetration rates (total assets as % of GDP)



Source: EIOPA

Note: 2017 data is preliminary and subject to revisions. For the UK data refers only to DB and hybrid schemes.

Figure 4.1 is based on data received by 25 countries (EEA) and 15 countries (EA) which provided total assets for 2017. The category 'Other' includes all countries except UK and NL.

Figure 4.2: Penetration rates for FI, GR, HR, PL, MT, BG, and HU are lower than 1%.

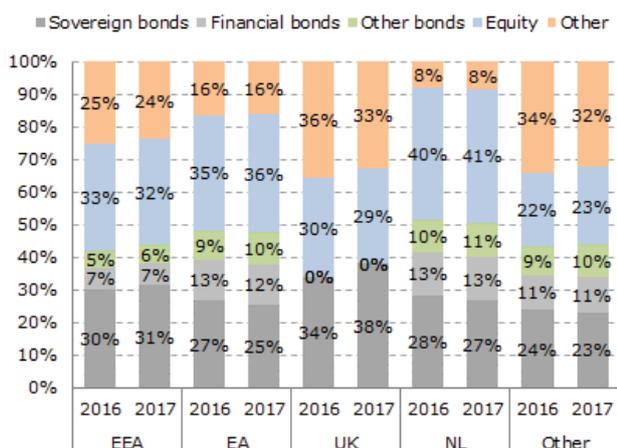
4.2. Investment allocation, market performance and funding of the sector

The investment allocation of pension funds overall remained unchanged in 2017 for the EEA (Figures 4.3 and Table 4.2). However, when looking at the country breakdown in more detail some changes can be identified. In the EA, a 1.4 percent decrease in investments in sovereign bonds can be seen, relocated mainly to other types of bonds and equity. In the UK, a substantial increase in the allocation to sovereign debt can be identified in 2017.

Fixed income continues to represent approximately half of the investment portfolio (44 percent for the EEA and 48 percent for the EA). In aggregate terms, equity represents a higher share of investments in the pension fund sector than in the

insurance sector (32 percent for the EEA and 36 percent in the EA in 2017).³⁸ Increased investments in equity (observed in the EA area, NL and in “other” countries- Table 4.2) may be driven by the prolonged low interest rate environment as well as by the positive market developments in the equity markets over the last two years. Subsequently, the exposure of the pension funds to market risk has also increased. It is mainly in the UK, where IORPs continue to increase their investments in fixed income securities (sovereigns) in an effort to de-risk balance sheets in view of their maturing membership. Based on the EIOPA Qualitative Spring 2018 survey among NSAs, no major changes are expected in asset allocation over the next year. The incentive for ‘search for yield’ behaviour is also identified by some jurisdictions. However, the strength of this behaviour is very limited across the countries. In some cases, this is due to the fact that underfunded IORPs have limited ability to increase their risk profile. Some pension funds are also reported to move to more ‘illiquid’ investments such as mortgages or investments related to infrastructure, but so far the size of these investments remain small overall and without major impact to the investment policies. Lastly, one authority also reported the shift of investments from traditional ‘domestic’ sovereign bonds to investments through investment funds (CIUs-collective investment undertakings).

Figure 4.3: Investment Allocation in 2016 and 2017 (in %)



Source: EIOPA

Note: Data for 2017 is preliminary and subject to revisions. Figures 4.3 is based on 24 countries for the EEA and 14 countries for the EA that provided the investment breakdown for 2017. Data for NO and FI is not yet available. Data for the UK includes DB and HY schemes only. The category ‘Other’ includes all the countries except the UK and NL.

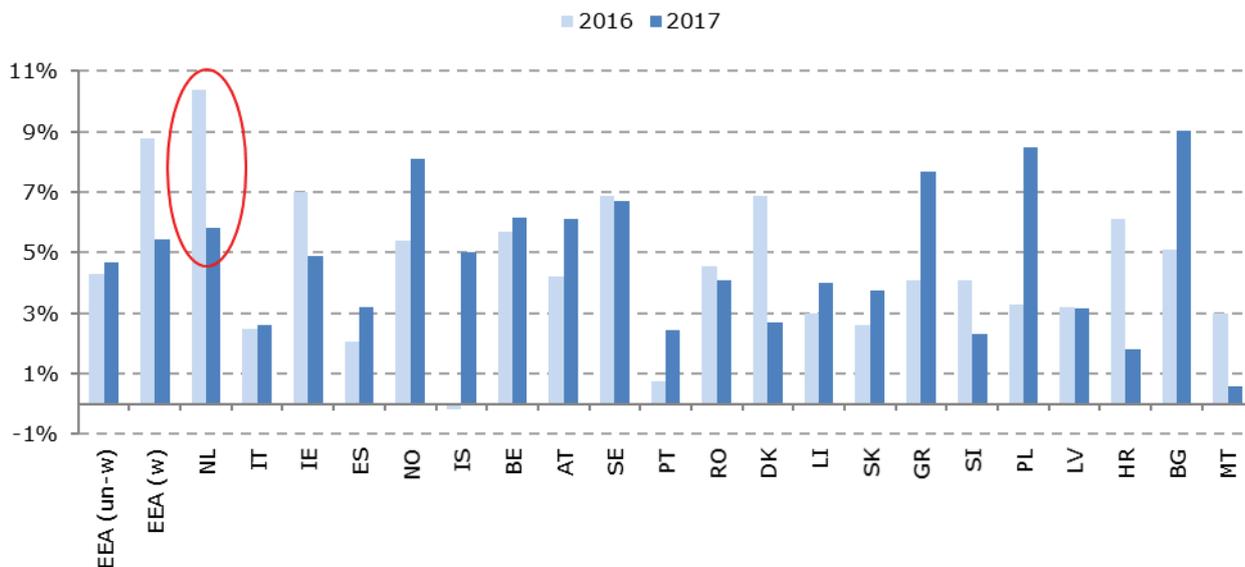
Table 4.2: Percentage changes in Investment Allocation between 2016 and 2017 (in %)

	Sovereign bonds	Financial bonds	Other bonds	Equity	Other
EEA	1.3%	-0.1%	0.4%	-0.3%	-1.4%
EA	-1.4%	-0.1%	1.1%	0.7%	-0.3%
UK	4.2%	0.0%	0.0%	-1.3%	-2.9%
NL	-1.6%	-0.1%	0.8%	0.5%	0.4%
Other	-0.8%	0.3%	1.2%	0.9%	-1.5%

The weighted average rate of return on assets substantially decreased since 2016 whereas the un-weighted average rate of rate of return on assets remained broadly at the same level (Figure 4.4). The decrease in the weighted average return on assets is primarily due to the performance of investments in the NL, which bears a large weight in the calculation of this average and saw a sharp decline in returns in 2017.

³⁸ Not evenly distributed across the countries of the sample. Equity exposures may vary from 6% in DK and ES of total assets to 41% in the NL.

Figure 4.4: Rate of Return on Assets (in %)



Source: EIOPA

Note: Data for 2017 is preliminary and subject to revisions. Both the weighted and un-weighted averages for the EEA are calculated based on the 21 countries, which provided data and are depicted in the chart. The weighting is based on total assets. Please note that data on UK, DE, FI, LU and HU for 2017 are not yet available.

The weighted average cover ratio for DB schemes increased in 2017 (Figure 4.5).³⁹ For 2017, preliminary data for a small sample of countries indicates that the weighted average funding situation improved from 96% in 2016 to 101% in 2017, whereas the un-weighted average cover ratio remained unchanged at 116%. However, it should be noted that the sample is small and that the overall averages for the EEA may change significantly in the next report.

Figure 4.5: National cover ratios (in %)



Source: EIOPA

Notes: Data for 2017 is preliminary and subject to revisions.

Both the weighted and un-weighted averages for the cover ratio are calculated on the basis of the 10 countries that provided data and are depicted in this chart. The weighting is based on total assets. Cover ratios refer only to DB schemes. Due to different calculation methods and legislation, the reported cover ratios are not fully comparable across jurisdictions.

³⁹ Cover ratios are defined as net assets covering technical provisions divided by technical provisions.

Cover ratios below 100% are a potential cause for concern as they signal that IORPs have insufficient assets to pay future pensions. The IORP stress test conducted in 2017 also revealed that in aggregate terms for the DB sector, there are insufficient assets to cover liabilities under both the national and the common balance sheet analysis even under the baseline scenario. More specifically, the adverse market scenario led to a decline on the aggregate national funding ratio from 97% to 79% of liabilities for the DB part of the stress test. This corresponded to a fall in the excess of assets over liabilities from -3% to -21% of liabilities or from EUR -49 bn to EUR -301 bn.⁴⁰ These identified deficits may need to eventually be covered by sponsor support, pension protection schemes and/or benefit reductions, which could have macroeconomic repercussions as well.

Low cover ratios are dealt with in different ways in countries across the EU. For instance, in the UK as well as in other countries where cover ratios are low, full or partial sponsor support is in place since many years. Furthermore, in the UK and Germany pension protection schemes are in place and cover the insolvency of the employer in some cases. However, the IORP stress test also revealed that significant number of sponsors of the participating IORPs might also face challenges in meeting their potential future obligations. A potential spill over into the real economy cannot be excluded since the adverse impact to sponsors and potential benefit reductions of beneficiaries may take place. Recovery mechanisms mitigate the short-term effects on financial stability, but in the longer-term put the burden disproportionately on younger generations.

The following box gives an example of mortgage lending activities of pension funds in Iceland (Box 4.1).

Box 4.1: Mortgage lending activity of pension funds to members - The case of Iceland

Most Icelandic pension funds⁴¹ have a long tradition of providing loans to their members. In the beginning, it was considered a service to the members of the funds, under better conditions than available in other market segments on the expense of lower interests on their savings in some cases. This ratio of loans in the pension funds' portfolio remains quite high when compared with most of the OECD countries. At the end of 2016, the allocation of loans was 6% of assets. There are two countries (Germany and Korea) with a higher allocation of loans in their portfolio, but in those cases the main part are general loans and not mortgage loans to members.⁴²

Recent developments

Until 2004, the main provider of housing financing loans was the state owned entity Housing Finance Fund, mainly financed by the pension funds through state guaranteed bonds. Pension fund loans were also available, but they were usually

⁴⁰ <https://eiopa.europa.eu/Pages/Financial-stability-and-crisis-prevention/Occupational-Pensions-Stress-Test-2017-.aspx> - p.33

⁴¹ Pension funds in Iceland are defined according to Act No. 129/1997. They are not subject to the IORP Directive but have very similar characteristics.

⁴² OECD: Pension Markets in Focus. 2017. <http://www.oecd.org/finance/private-pensions/globalpensionstatistics.htm>.

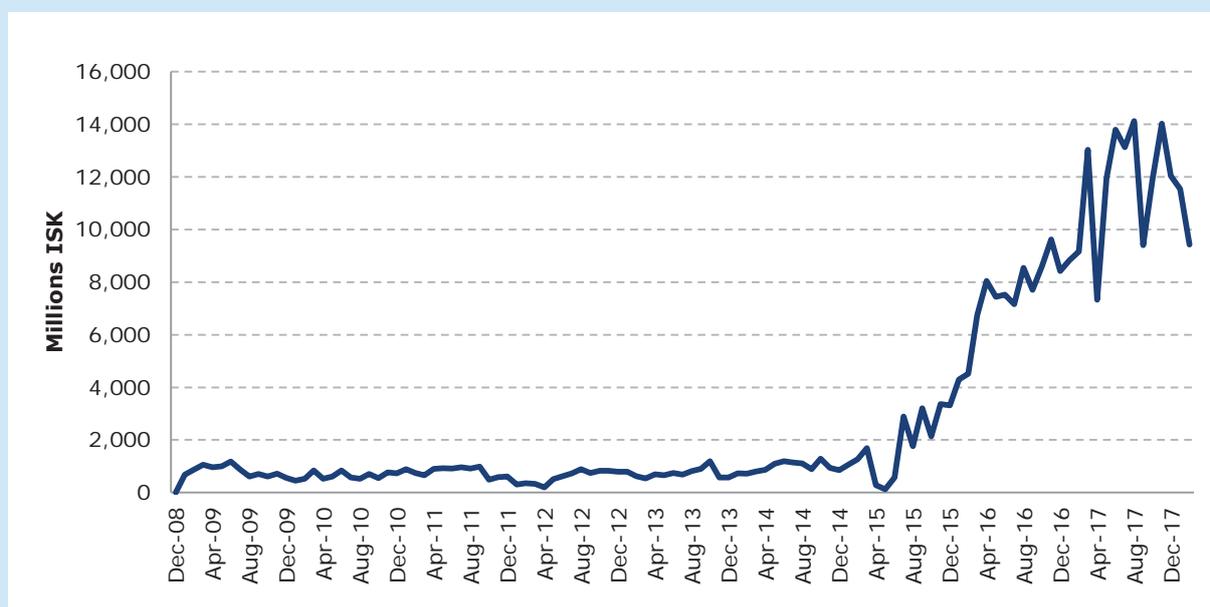
only given to active members and the maximum loan to value was 65% (legislation changed to 70% in 2006), so most people were in need of additional funding. In 2004, the banks started to offer loans with 90% or even 100% loan to value. Almost all of these loans were either index linked with the Icelandic consumer price index or denominated in foreign currencies. When the Icelandic króna depreciated in the financial crises this imprudent lending led to many difficulties in households' finances.

In the aftermath of the financial crisis, the Icelandic Parliament in cooperation with the Central Bank of Iceland implemented capital controls, which cut off new foreign investment for pension funds. With a collapsed equity and corporate bond market and limited publication of government bonds, investment opportunities became limited. Consequently, pension funds increasingly focused on lending activities, which really took off in 2015 (Figure 4.6). Currently, most pension funds lend to both active and deferred members.⁴³

From the consumers' perspective, pension fund loans are more beneficial and rising real estate prices have given the possibility to refinance. Tax changes have also made refinancing less expensive.

The development of new lending of pension funds since 2009 demonstrates a substantial increase peaking in Q1 2017 (Figure 4.6).

Figure 4.6: New lending of pension funds⁴⁴



Financial stability issues

Due to the risk of an overheating economy and picking up of mortgage lending, the Financial Supervisory Authority of Iceland (FME) issued rules on maximum

⁴³ Most of the funds are affiliated with trade unions, whose total membership is around 85% of the workforce. Hence, the potential customer base is quite extensive.

⁴⁴ Source: Central Bank of Iceland

loan to value (LTV) in mortgage loans in the summer 2017. The limit, which is 85 per cent, does not affect the pension funds, as the maximum LTV stated in the legislation is 75 percent.⁴⁵ FME has furthermore power to limit lending in relation to the income of borrowers, tools usually known as debt service to income (DSTI) or debt to income (DTI) but Icelandic authorities have so far not seen any reason to limit the lending activity further and no new trends in the competition have been observed.

The increased activity of pension funds has raised concerns for their competitors. In the process of changing the pension fund legislation in 2016, the Icelandic Financial Services Association⁴⁶ sent a letter to the Parliament, asking for a ban on pension fund lending. They claimed that pension funds are shadow banks⁴⁷ and therefore point to the risk of supervisory arbitrage. It was argued that the regulation of banks has been strengthened in recent years and in case of pension funds' distress they can pay less pension and the government would need to increase the first pillar pension, which would make a strain on public funds. Furthermore, they stated that it would be more natural if pension funds funded housing by investing in market bonds. The Icelandic Pension Funds Association responded by claiming that such a prohibition would not be in the public interest. Pension funds had longstanding experience in providing loans and were under strict supervision, as well as the banks. Funding with market securities would just be more expensive for the consumer. As an outsider in this debate, FME has observed that the pension funds have stricter rules than banks due to lower loan to value and therefore there have been some concerns that banks' customers have worse credit standing.

It is fair to say that there is a divided opinion on whether it is healthy for the financial market to have such a high activity of the pension funds in the mortgage loan market. However, with legal changes in 2016 with regards to the risk classification of assets, mortgage loans are treated like government bonds, so it can be concluded there is a political will that this option continues to be available. Furthermore, mortgage loans provide increased diversification in the investment portfolio of pension funds and promote competition in the mortgage market which may lead to the reduction of the procyclicality of lending.

The macroprudential tools available in Iceland generally do not apply to pension funds. As mentioned before, the rules on maximum LTV do not affect them, and the countercyclical capital buffer is only applicable for banks. It could therefore be beneficial to at least have some tools available for the authorities to use in the

⁴⁵ Technically pension funds could provide a loan with a higher loan to value, but that loan would be classified as an investment with a higher risk than mortgage loans in general.

⁴⁶ This association represents banks, insurance companies, leasing companies, securities companies and card companies, but not pension funds.

⁴⁷ According to EBA Guidelines on Limits on exposures to shadow banking entities which carry out banking activities outside of a regulated framework under Article 395(2) of Regulation (EU) No 575/2013, pension funds are not defined as shadow banks. http://www.eba.europa.eu/documents/10180/1310259/EBA-GL-2015-20+GL+on+Shadow+Banking+Entities_EN.pdf

pension market if the increase in mortgage loans went out of hand, as the IMF has suggested.⁴⁸ In that case, it could be considered to use DSTI/DTI tools, as those measures would probably affect banks and pension funds in a similar manner.

Several countries such as for example Hungary, Ireland, Italy, Estonia, Latvia, Luxembourg, Poland, Slovenia and Spain do not allow pension funds to lend to individuals and companies. There can be various reasons to limit or prohibit direct lending of pension funds, both from a microprudential and macroprudential perspective. Pension funds are competing with other market players like banks. Therefore, there can be a risk of regulatory arbitrage, due to credit risk capital requirements for banks that usually do not apply for pension funds. Lending can also decrease investments in other types of assets classes, like bonds and equities and increase exposure to real estate. Finally, many jurisdictions consider that banks have in general better know-how and infrastructure in lending activities and risk assessment dealing with private loans. Even though loans to members is permitted in around half of the OECD member states, what is specific for Iceland is the extensive use of this option. According to the OECD study in 2017, loans to members accounted for 5.3 percent of assets in 2015, where the second highest ratio in the United States amounted to 0.6 percent. This was also reflected in the IMF 2017 Article IV Consultation for Iceland, where concerns that housing pressures could tip the economy into overheating were expressed

⁴⁸ IMF 2017 Article IV Consultation for Iceland