PensionsEurope

Pension Fund Statistics 2017

December 2017

www.pensionseurope.eu

About PensionsEurope

PensionsEurope represents national associations of pension funds and similar institutions for workplace pensions. Some members operate purely individual pension schemes. PensionsEurope Members are large institutional investors representing the **buy-side** on the financial markets.

PensionsEurope has **24 member associations** in 19 EU Member States and 3 other European countries with significant – in size and relevance – workplace pension systems[1].

PensionsEurope member organisations cover different types of workplace pensions for over **110 million people.** Through its Member Associations PensionsEurope represents more than **€ 4 trillion of assets** managed for future pension payments. In addition, many members of PensionsEurope also cover personal pensions, which are connected with an employment relation.

PensionsEurope also has **25 Corporate and Supporter Members** which are various service providers and stakeholders that work with IORPs.

PensionsEurope has established a **Central & Eastern European Countries Forum (CEEC Forum)** to discuss issues common to pension systems in that region.

PensionsEurope has established a **Multinational Advisory Group (MAG)** which delivers advice on pension issues to PensionsEurope. It provides a collective voice and information sharing for the expertise and opinions of multinationals.

What PensionsEurope stands for

- A regulatory environment encouraging workplace pension membership;
- Ensure that more and more Europeans can benefit from an adequate income in retirement;
- Policies which will enable sufficient contributions and good returns.

Workplace pensions offer

- Economies of scale in governance, administration and asset management;
- Risk pooling and often intergenerational risk-sharing;
- Often “not-for-profit” and some/all of the costs are borne by the employer;
- Members of workplace pension schemes often benefit from a contribution paid by the employer;
- Wide-scale coverage due to mandatory participation, sector-wide participation based on collective agreements and soft-compulsion elements such as auto-enrolment;
- Good governance and alignment of interest due to participation of the main stakeholders.

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[1] EU Member States: Austria, Belgium, Bulgaria, Croatia, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Luxembourg, Netherlands, Portugal, Romania, Spain, Sweden, UK. Non-EU Member States: Iceland, Norway, Switzerland.

1. Introduction

PensionsEurope[2] was established by pension fund managers from Belgium, Ireland, the Netherlands, and the UK in 1981. Since then, PensionsEurope has significantly expanded and developed and currently it represents 24 member associations in the EU Member States and other European countries. The number of Members and Beneficiaries and the assets under management that our Member Associations represent have greatly increased over the years, and they continued to grow also in 2016.

According to PensionsEurope Pension Fund Statistics 2017 **PensionsEurope Member Associations include pension funds** (only private sector, and only the 2nd pillar) **which represent around €3549 billion assets and 65 million Members and 27 million Beneficiaries (including pensioner members and deferred members)[3]. If all private pension arrangements** (both the 2nd pillar and the 3rd pillar, including pension funds/IORPs, group insurance, book reserves, and personal pensions) **are included, they represent around €4083 billion assets**:

- Pension funds: €3549 billion assets and 65 million Members and 27 million Beneficiaries;
- Book reserves: €334 billion assets and 10.2 million people;
- Group insurance: €61 billion assets and 7.7 million people;
- The 3rd pillar personal pensions: €139 billion assets and 16.3 million people[4].

The purpose of PensionsEurope Pension Fund Statistics 2017 is explicitly to show what our Member Associations represent, not the whole landscape of workplace or supplementary pensions in certain Member States or in Europe.

Currently the ECB, EIOPA, Eurostat, and OECD are aligning their reporting standards for pension funds and PensionsEurope shares their aim to have better, comparable and relevant information on occupational pensions in Europe. However, as statistical reporting and collecting information always contain costs for pension funds, it should be very carefully considered which information is really relevant and needed, and how often they should be reported[5]. Any extra costs will be finally paid by the sponsor and/or Members and Beneficiaries. PensionsEurope is ready and willing to further provide our expertise in order that the benefits of the new reporting requirements will outweigh the costs.

[2] At the time "the European Federation for Retirement Provision" (EFRP).
[3] The number of Members and Beneficiaries contain some double counting.
[4] The number of people contain some double counting from the 2nd and 3rd pillar.
[5] See PensionsEurope answer to the public consultation on the draft ECB regulation on statistical reporting requirements for pension funds and PensionsEurope answer to the consultation on EIOPA's information requests from pension funds.

2. Pension funds' assets under management

Most of the assets under management of pension funds that PensionsEurope Member Associations represent are in the Netherlands and in the UK.

Table 1. Number of pension schemes per country and assets held by them

Country	Number of pension schemes	Assets held by pension funds (billion EURO)[6]
Netherlands	290	1266.60
United Kingdom	1300	1173.80
Switzerland	1682	406.89
Germany	171	184.80
Ireland	68481	125.50
Italy	266	105.44
Spain*	1573	76.10
Sweden*	9	36.72
Norway	87	34.90
Iceland	25	26,88
Austria	10	21,40
Belgium	159	23.80
Portugal	185	17.27
France	24248	13.90
Croatia	12	11.14
Romania	7	6.93
Bulgaria	18	5.06
Finland	47	4.66
Estonia	20	3.10
Lithuania	21	2.49
Luxembourg	14	1.51
TOTAL	**98625**	**3548.89**

** PensionsEurope has two Member Associations in Spain and in Sweden. Spanish INVERCO represents the assets of €35.43bn and 1287 pension funds, whereas Spanish CNEPS represents €40.67bn and 286 pension funds. In Sweden, SPFA represents assets of €20.00bn (the number of pension funds is unknown) and Tjänstepensionsförbundet €16.72bn and 9 pension funds.*

In the Netherlands the assets grew by 11% between 2014-2016 and even by 32% (from €956.87bn to €1266.60bn) between 2013-2016. In the UK the successful roll out of automatic enrolment has had a major impact on the DC landscape and significantly increased the total amount of pension funds' assets. In addition to the UK and the Netherlands, the assets grew significantly in most of the countries between 2013-2016, including the increase of:

[6] In general, the statistics originate from 2016, but from Switzerland, Germany, and Sweden (Tjänstepensionsförbundet) they originate from 2015.

- 123% in Romania (from €3.11bn to €6.93bn)
- 77% in Luxembourg (from €0.85bn to €1.51bn)
- 77% in Iceland (from €15.2bn to €26.9bn)
- 75% in Estonia (from €1.7bn to €3.1bn)
- 62% in France (from €8.6bn to €13.9bn)
- 61% in Bulgaria (from €3.14bn to €5.06bn)
- 58% in Lithuania (from €1.6bn to €2.5bn)
- 46% in Croatia (from €7.63bn to €11.14bn)
- 37% in Ireland (from €91.5bn to €125.5bn)
- 32% in Norway (from €26.5bn to €34.9bn)
- 32% in Belgium (from €18.0bn to €23.8bn)
- 24% in Italy (from €85bn to €105.44bn)
- 20% in Portugal (from €14.42bn to €17.27bn)
- 20% in Austria (from €17.9bn to €21.4bn)

Also, other pension statistics[7] have shown the growing pension assets and their good returns in Europe. According to the latest OECD Pensions Markets in Focus (2017 edition), the total assets of funded private pension arrangements as a percentage of GDP are particularly high in the following European countries: Denmark (205.9%), the Netherlands (178.4%), Iceland (157.7%), Switzerland (123.0%), the UK (97.4%), and Sweden (76.0%). Some see risks that pension funds have large assets in certain countries, but we believe that it is a much smaller concern compared to the situation that in many countries the pension assets are low.

PensionsEurope welcomes further research on the quality of occupational and personal pensions and the outcome of pension savings. PensionsEurope has highlighted numerous specificities that the research should take into account in order to give a realistic picture of the quality and outcome of pension savings[8]. If ignoring these specificities, the research faces a serious challenge of comparing apples and pears.

When it comes to the number of pension funds (see Table 1 above), PensionsEurope Member Associations represent around 98 625 pension funds (2,6% increase from the previous year) in 21 countries[9]. Around 70% of these pension funds (68 481) are located in Ireland, as there is a large number of small pension funds in Ireland. Most of the Irish pension schemes have only 1 member and would not be required to be registered in some other countries.

[7] See for instance OECD Pension Markets in Focus, 2017 edition and EIOPA occupational pensions statistics.
[8] See PensionsEurope opinion on the research on the quality and outcome of pension savings – Comparing apples and pears.
[9] PensionsEurope has Member Associations in 22 countries, but in Hungary the National Association of Voluntary Funds represents only the 3rd pillar personal pensions.

On the other hand, pension funds in the Netherlands are particularly big. Still around a decade ago there were more than 1000 pension funds operating in the Netherlands, whereas currently PensionsEurope Member Association Pensioenfederatie represents 290 pension funds. As a consequence of mergers, the number of pension funds in the Netherlands is expected to decline further in the upcoming years.

Table 1 on page 4 and Table 2 on pages 6-7 illustrate well the diversity of the European pensions' landscape. Pension systems in Europe are as diverse as the Member States themselves. That is also why the modernised rules for pension funds[10] recognise that (i) the way in which IORPs are organised and regulated varies significantly between Member States – not least because their integration with the first pillar (state) pension provision varies, (ii) it is not appropriate to adopt a 'one-size-fits-all' approach to IORPs, and (iii) the European Commission and EIOPA should take account of the various traditions of Member States in their activities and should act without prejudice to national social and labour law in determining the organisation of IORPs[11].

3. Pension funds' coverage

PensionsEurope Member Associations include pension funds (only the 2nd pillar) that represent around 65 million Members and 27 million Beneficiaries (including pensioner members and deferred members)[12]. A large part of them are from the UK and the Netherlands, as most of the assets under management of pension funds are in those countries as well. Otherwise, the total amount of assets does not directly reflect the total number of people covered in different countries. Particularly Romania, Bulgaria, Croatia, Lithuania and Estonia are comparatively higher in the ranking of pension funds' coverage than in the ranking of pension funds' assets under management, as the average income and pensions are also lower in these countries.

Table 2. Pension funds' coverage

Country	Number of members	Number of beneficiaries
United Kingdom	18,725,000	10,493,000
Netherlands	5,504,352	12,728,709
Germany	7,903,000	1,493,000
Romania	6,798,439	n/k
Switzerland	4,050,094	888,825
Spain*	4,595,042	97,432

10 Directive of the European Parliament and of the Council on the activities and supervision of institutions for occupational retirement provision (IORPs) (recast)

11 See PensionsEurope brochure on the outcome of the IORP II Directive.

12 The number of Members and Beneficiaries contain some double counting.

Italy	4,046,029	118,362
Bulgaria	3,864,275	n/k
France	2,181,000	n/k
Croatia	1,784,169	n/k
Sweden*	1,112,062	187,637
Lithuania	1,256,038	n/k
Belgium	770,938	568,598
Austria	808,074	94,628
Estonia	738,080	32,272
Ireland	411,179	n/k
Norway	148,000	330,000
Ireland	411,179	n/k
Iceland	256,931	121,576
Portugal	164,197	125,893
Finland	12,500	60,000
Luxembourg	16,372	n/k
TOTAL	**65,145,771**	**27,339,932**

** PensionsEurope has two Member Associations in Spain and in Sweden. Spanish INVERCO represents 2,035,042 members and 97,432 beneficiaries, whereas Spanish CNEPS represents 2,560,000 members (the number of beneficiaries is unknown). In Sweden, Tjänstepensionsförbundet represents 1,032,062 members and 187,637 beneficiaries and SPFA represents around 80,000 members (a number of beneficiaries is unknown).*

Between 2013-2016 pension funds' coverage increased in most of the countries, including the increase of:

- 42% in France (from 1,536,000 to 2,181,000)
- 29% in Iceland (from 294,507 to 378,507)
- 25% in Norway (from 382,000 to 478,000)
- 22% in Switzerland (from 4,058,979 to 4,938,919)
- 22% in Italy (from 3,322,004 to4,046,029)
- 19% in Luxembourg (from 13,718 to 16,372)
- 13% in Romania (from 6,039,261 to 6,798,439)
- 12% in Lithuania (from 1,116,600 to 1,256,038)
- 8% in Bulgaria (from 3,592,082 to 3,864,275)
- 7% in Austria (from 840,000 to 902,702)
- 6% in Estonia (from 725,200 to 770,352)
- 5% in Croatia (from 1,702,218 to 1,784,169)
- 3% in the Netherlands (from 17,659,484 to 18,233,061)

The reason for the remarkable increase of 42% in France is that Perco pension scheme is a relatively recent product which is provided by a growing number of companies, especially small and medium sizes. This trend is expected to continue, thanks to the promotion actions of the French asset managers, public authorities, and PensionsEurope Member Association AFG.

In the UK, thanks to the successful roll out of automatic enrolment the coverage has increased by several millions of people. In December 2017, PensionsEurope Member Association, the PLSA, represented already around 20 million members. Many Italian pension funds have also implemented automatic enrolment and the discussions about introducing automatic enrolment take currently place in some countries.

PensionsEurope continues to work to increase pension funds' coverage in Europe. We call on the European Commission and the EU Member States to work harder in order to promote and strengthen occupational pensions in Europe. The IORP II Directive contains PensionsEurope proposal that the European Commission should undertake further steps in supporting Member States' cooperation with social partners in the improvement of second pillar pension schemes and establish a High-Level Group of experts to enhance second pillar retirement savings in the Member States. Also, the sustainability and adequacy of pension systems are very important, and we welcome that for instance the European Commission's Annual Growth Survey 2018[13] calls on Member States to ensure the sustainability and adequacy of pension systems for all. Clearly this requires more supplementary pensions in Europe[14].

4. Type of schemes

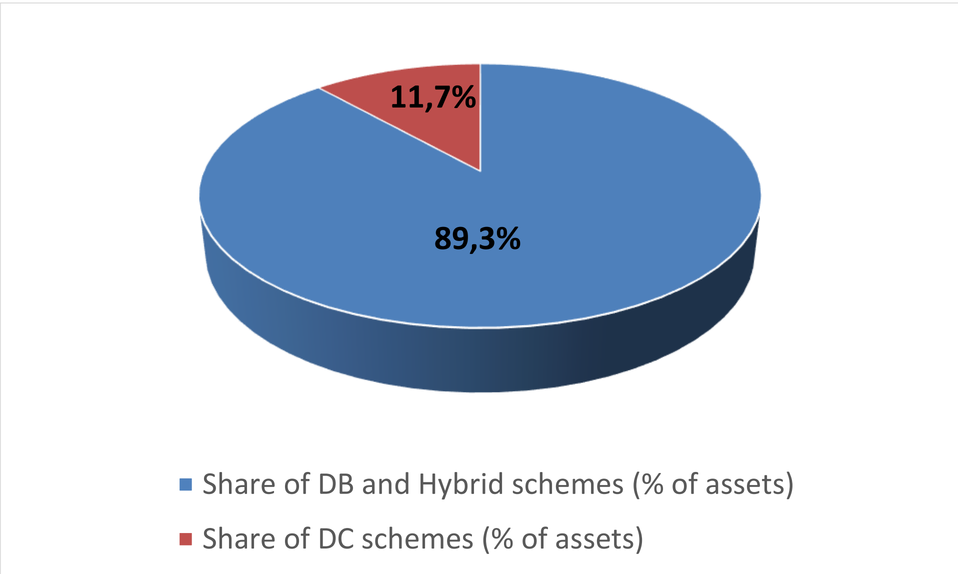
Across Europe, the majority of pension assets are still under Defined Benefit (DB) management while at the same time there is a growing trend towards the establishment of Defined Contribution (DC) pension plans for ongoing workplace pension provision. Against this changing backdrop, PensionsEurope has engaged in a forward-looking consideration of developments in order to contribute to the evolution of pensions. In June 2017, PensionsEurope published a paper "Towards a New Design for Workplace Pensions"[15] and its aim is to provide a framework for modern pension solutions in order to achieve good pension outcomes for participants and beneficiaries linking the best of the DB and DC world. This paper recognizes that the majority of new pension design ideas use elements from the development of DC plans, whilst there is a lot that can be learned from current DB that can be incorporated in future proof pension design as well.

[13] See the page number 11 of the European Commission's Annual Growth Survey 2018.
[14] See also the European Commission's 2018 Ageing Report.
[15] See PensionsEurope paper Towards a New Design for Workplace Pensions – Leveraging Defined Benefit Pension Design to Strengthen Workplace Pension Solutions for the Future in Europe.

In June 2017, PensionsEurope also published a paper "Principles for Securing Good Outcomes for Members of Defined Contribution Pension Plans throughout Europe"[16] that is our contribution to the evolution of DC pension plans, and a natural follow on from our previous papers[17]. Millions of citizens across Europe already rely upon workplace DC pension plans to supplement the pension benefits that they receive from the state. This number is likely to continue to increase significantly in the coming decades, as employers look for a less risky alternative to defined benefit pension plans and governments across Europe consider ways to help close the gap that is emerging – for economic and demographic reasons - between state pension provision and citizens' income needs in retirement. In light of the increasing reliance on workplace DC pension plans throughout Europe, it is essential that individuals can have confidence that workplace pension plans operate in their interests, are robust, well run and offer value for money. As we explore in our paper, this should ensure that the individual members will have good outcomes that will address their needs in retirement.

Currently in terms of assets 89,3% of the schemes that PensionsEurope Member Associations represent are still DB and hybrid, and 11,7% are DC schemes.

Figure 1. Type of schemes



PensionsEurope Member Associations represent almost purely DB schemes (including hybrid schemes) in Lithuania (100%) and in Norway (100% in capital, but some DC schemes in private sector pension funds have been established). However, almost all DB schemes in the Norwegian private sector have been closed for new members and employees below the age of 52 have been transferred to new DC schemes. Older employees still earn pension rights in

[16] See PensionsEurope paper Principles for Securing Good Outcomes for Members of Defined Contribution Pension Plans throughout Europe.
[17] See PensionsEurope papers Pension Design Principles applied to modern Defined Contribution solutions and Key Principles of Good Governance for Workplace Defined Contribution Pension Plans throughout Europe.

DB schemes. Thanks to collective agreements, there are still many open DB schemes in the Norwegian public sector. These schemes will probably, within a few years, include hybrid schemes for further earnings of pension rights.

DB schemes are also predominant particularly in the Netherlands (99,5%), Finland (99%), Sweden (99%), and Germany. In the Netherlands new laws on DC schemes have been introduced and there is ongoing discussion about the current pension system. Currently in Germany there are only DB and hybrid schemes, and the first collective DC schemes (social partner model) will be introduced in 2018. In Sweden new DC schemes have been negotiated and introduced in all sectors. New and younger employees are usually covered by new DC schemes, whereas older employees often remain covered by the DB scheme. In some cases, there are also long transition periods in the transfer from DB to DC. DB schemes will thus remain for the foreseeable future.

In 5 countries (Bulgaria, Estonia, France, Croatia, and Romania) PensionsEurope Member Associations represent only DC schemes. Their share is particularly high also in Italy (93%) and in Iceland (87,7%).

In the UK, the Pensions and Lifetime Savings Association's (PensionsEurope Member Association) 2014 Annual Survey revealed that active membership of DC schemes outnumbered that of DB schemes for the first time. DB plans have traditionally been the dominant form of pension provision by the UK private sector employers, but this has changed, particularly over the past 15 years, with most private sector DB plans having been closed firstly to new members and more recently the future accrual of benefits. Increasing and unpredictable cost for employers (for example due to rising life expectancy, variable investment returns, and growing regulatory burdens) have been the primary drivers of the decline in DB. The costs of DB provision in the UK are particularly inflexible because, unlike in some other countries, the law fully protects past benefits that have already accrued to members (it is not generally possible to reduce those benefits) and statutory minimum increases must also be provided on pensions in payment and in deferment.

A long lasting low interest rate environment, which seems probable, is likely to further accelerate the closure of DB schemes. However, in the occupational pensions sector DB schemes continue to be predominant in many countries, in particular as regards the assets under management.

5. Asset allocation

Pension funds play an important role in the long-term financing of the EU's real economy and contributing to jobs and growth in Europe. For instance in 2016, the Romanian pension funds invested most of their assets and the Dutch pension funds around half of their assets in the EEA (and Switzerland). Pension funds are an important source of funding because they increase the amount of market-based financing available to the economy and improve the efficiency of financial intermediation. Countries with a substantial funded pension funds sector tend to have larger capital markets.

The EU and the euro have made it easier to invest in Europe, and growing, developing, and stable economy attracts more investments. Hopefully the Brexit will not affect negatively the economy and set up new barriers to asset flows in Europe. A strong economy is needed so that sponsoring employers can support high-quality workplace pension schemes and a robust financial sector is crucial for pension funds' investments.

Although pension schemes are not rushing to overhaul their investment strategies, the uncertainty in general has a wider negative impact. The rising uncertainty can confuse even the well-informed investors. Therefore, in this challenging and uncertain environment it is of utmost importance that policymakers and supervisors do not pose any unnecessary burden, costs, and uncertainty for pension funds. Their consequences would be harmful also for the wider European public, as they would lead to decreasing investments by pension funds in the European real economy that creates jobs and growth. Instead, policymakers should focus on removing the barriers to cross-border investment in the EU.

A long investment horizon allows pension funds to invest in asset classes that are not accessible to short-term investors, such as illiquid, private assets. In addition to higher expected returns as well as potentially lower risks, these investments make a significant contribution to the European economy.

As long-term investors, pension funds are able to mitigate financial shocks and work as stabilizing factor for the financial sector[18]. Pension funds' long-term investment horizon and their ability to follow contrarian investment strategies (i.e. strategy in which they invest against the prevailing market trend) support the proposition that pension funds can act as shock absorbers in the economy by providing liquidity and by not being forced to sell assets when asset prices are squeezed[19].

Therefore, it is important that legislation continues to allow the countercyclical behavior of pension funds. Pension funds do not employ significant leverage, as they are legally limited in their borrowings. The low level of leverage ensures that pension funds do not transmit significant financial stress to other counterparties. According to the original and recently recast IORP Directive, pension funds can use derivatives only to hedge risks and not to speculate. Hence, the potential build-up of leverage is limited.

[18] See PensionsEurope Position Paper on EIOPA's IORP Stress Test 2015 and PensionsEurope Position Paper on EIOPA's IORP Quantitative Assessment 2015 and EIOPA's opinion for Risk Assessment and Transparency for IORPs.

[19] See for instance European Financial Stability and Integration Review 2017.

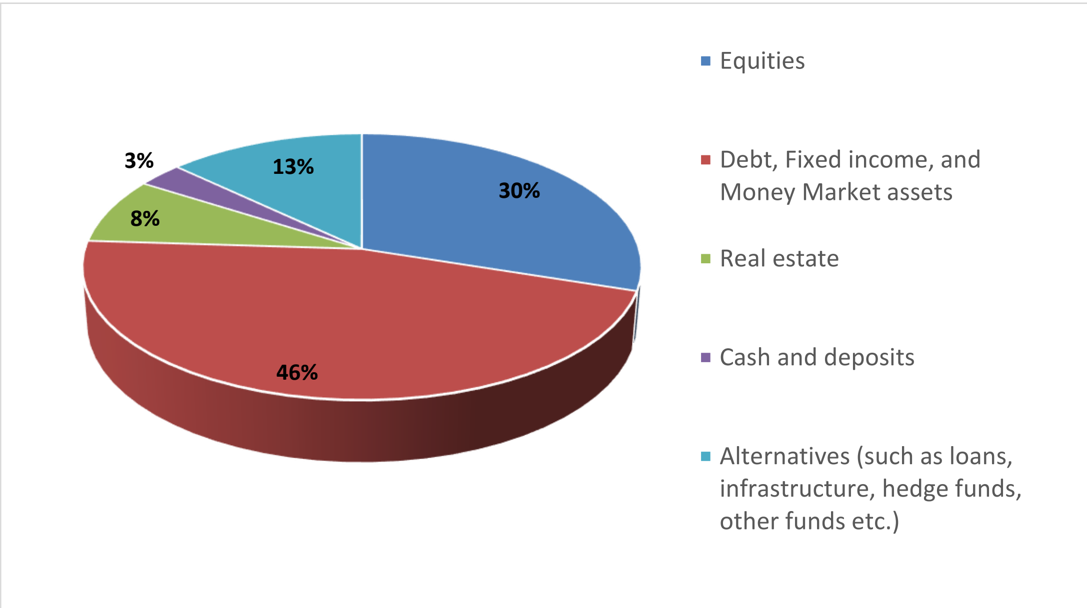
It is important that the right conclusions are drawn from the fair-market value of pension funds' assets, for instance when the values of equities drop in a financial crisis. This opens an excellent opportunity for long-term investors to buy, and therefore, pension funds should not be forced to sell when the value of their assets is at the lowest. Thanks to pension funds' countercyclical behaviour, they can remarkably contribute to financial stability, as they did in the last financial crisis.

Pension funds' investment strategy must balance risk, return and costs. Several drivers can spur a market shift in pension asset allocations and they should not be considered independently, but rather as an ecosystem in which each influences the others. The main drivers include diversification, risk management, hedging against inflation, asset and liability management, and return on investments.

Not only is asset class diversification crucial, but geographical diversification is also key in order to mitigate country or regional risks. Traditionally pension funds have focused strongly on their domestic markets (stocks and bonds), but pension funds are investing more and more abroad and in alternatives. However, a big part of pension funds' assets is still invested in the countries and regions that they know best. The reasons for foreign exposure in investment strategies vary depending on risk tolerance, currency fluctuations, inflation and local market conditions.

Around half of the assets (46%+3%=49%) under management of pension funds that PensionsEurope Member Associations represent are still in cash, deposits, debt, fixed income, and money market assets. Their share has slightly decreased from the previous year (51.9%).

Figure 2. Asset allocation



Traditionally pension funds have invested a lot in fixed income, but over the last decades they have started to shift towards equities and alternatives. Many pension funds have realized that a small allocation to alternative investments is not able or sufficient to generate the required returns. Therefore, there is a pressure to increase alternative investments (also in order to diversify risks), even though the European pension funds are still very far from the allocation to alternatives which for instance the Australian and Canadian pension funds already have in place. The largest shares in alternatives PensionsEurope Member Associations have in Portugal (26%), Estonia (24%), the UK (23%[20]), and SPFA in Sweden (23%). On the other hand, investments in equities are most predominant in Lithuania (51%), Ireland (46%), Belgium (41%), and Finland (37%).

During the last decade, an asset pooling has become more and more popular amongst pension funds. It can help pension funds to find more effective ways to manage their assets and to have lower investment fees. Particularly, multinationals search for better governance and oversight by pooling their assets. But increasingly also smaller funds do the same.

The search for yield through the shift from traditional asset classes towards riskier investments is a necessary step for pension funds as this is in line with their primary objective to be able to provide for pensions. This is very obvious for those who provide pensions with defined guarantees. Not searching for yield and remaining fastened to traditional investments, such as government bonds, would undoubtedly lead to smaller pensions.

Furthermore, in the context of the Capital Markets Union (CMU), pension funds have been invited to make investments in order to boost jobs and growth across the EU. Completing the CMU is crucial in order boost pension funds' investments in Europe. PensionsEurope has e.g. listed numerous actions that the EC and Member States should take and given policy recommendations on fostering long-term investments in infrastructure and real estate, on sustainable investments, and on the use of derivatives to hedge risks[21]. There should be enough "big" investment opportunities available across Europe that match pension funds' needs.

Particularly, the obstacles with the withholding tax (WHT) procedures pose a major barrier to build the CMU[22]. In order to boost the economic growth in the EU, PensionsEurope calls on the EC and Member States to remove all the WHT barriers to cross-border investments. This means that the EU Member States shall respect the case-law of the Court of Justice of the European Union, reciprocally and automatically recognize pension funds, and ensure simple, transparent, and inexpensive WHT refund processes. PensionsEurope has stressed that the EC's upcoming code of conduct on WHT procedures should be as ambitious as

[20] The information is based on the PLSA Annual Survey which does not cover all the Members of the PLSA.
[21] See PensionsEurope answer to the European Commission's Capital Markets Union mid-term review.
[22] See PensionsEurope position paper on the withholding tax refund barriers to cross-border investment in the EU.

possible[23]. Furthermore, Member States should make a strong political commitment to respect the code of conduct.

The ECB's quantitative easing programme and the environment of low interest rates poses big challenges to pension funds, and especially, to defined benefit funds[24]. Both the asset and the liability sides of pension systems are influenced. Low interest rates influence pension funds as well as annuity providers if the value of future liabilities is discounted using market based interest rates. Low interest rates also influence the future value of savings because fixed securities are often a big part of the investment portfolio.

DB pension funds with long-dated, interest rate sensitive liabilities will, unless they are hedged, have a negative duration gap meaning that the duration of long-term fixed liabilities exceeds that of assets. Lowering yields increase this gap as the duration increases when long-term rates fall and the more so the longer the original duration. Thus, the value of liabilities rises faster than that of the assets. Exposure limits and solvency constraints become binding. There is a hunt for duration in the market, which leads to greater demand for long-term bonds as long-term rates fall. As a result, the funding ratios and solvency positions of DB pension funds may become increasingly difficult.

The situation can be more positive for DC pension funds, which by definition don't have liabilities, and may experience gains in the value of their bond holdings from the drop-in interest rates and thus a temporary improvement in their investment performance. However, the present investment environment is becoming very difficult and many expect that the future returns will be on a lower level than in the past. As for DB pensions in DC, those who wish or have to purchase an annuity with their DC pension savings, will find them more expensive because of the low interest rates.

6. Other private pension arrangements

In addition to IORPs and pension funds, PensionsEurope Member Associations represent also other private pension arrangements: book reserves, group insurance, and the 3rd pillar personal pensions.

The book reserves totally covering €334 billion and 10.2 million people are represented in Germany, Sweden (Tjänstepensionsförbundet), and Italy. The book reserves are pension provisions that an employer realises on company's balance sheet to pay an occupational pension when an employee reaches the retirement age. They are the most widely utilised

[23] See PensionsEurope Position Paper on the EC's Code of Conduct for relief-at-source from the withholding tax procedures.

[24] See Position paper of the EIOPA Occupational Pensions Stakeholder Groups (OPSG) on Quantitative Easing and PensionsEurope Paper on the effects of Quantitative Easing on pension funds.

type of occupational pension plans in Germany and they are particularly well-suited for small companies thanks to their simplicity.

German aba is the only Member Association of PensionsEurope that represents group insurance. But also aba's representation is limited, as it represents group insurance only if it is an occupational pension (that is the case for direct insurance "Direktversicherung"). Under a direct insurance scheme, an employer takes out a life insurance policy on behalf of an employee and pays contributions to the contract. The employee has a direct entitlement to the benefits accrued under the contract against the insurance company. PensionsEurope's German Member Association aba represents €61.3bn of assets and 7,738,000 people that are covered by the direct insurance.

The third pillar personal pensions are represented by less than half of PensionsEurope's Member Associations (11/24): Bulgaria, Croatia, Estonia, Hungary, Iceland, Italy, Lithuania, Portugal, Romania, Spain (INVERCO), and Sweden (Tjänstepensionsförbundet). 51% of the total amount of assets under management (€70.49bn/€138.86bn) and 48% of people (7,827,397/16,320,692) are located in Spain. Italy covers the second largest piece with 31% of the total amount of assets under management (€43.3bn/€138.86bn) and 23% of people (3,731,448/16,320,692). In both countries the assets of the third pillar personal pensions grew remarkably between 2013-2016: In Italy by 53% and in Spain by 22% where not only the supervisor, but also the private pension sector's financial institutions have engaged in promoting private pensions by giving financial education and making people aware of the reality of public pension schemes and the need for retirement planning.

In addition to Italy and Spain, the assets of third pillar personal pensions grew significantly in most of the countries between 2013-2016, including the increase of:

- 112% in Lithuania (from €0.038bn to €0.08)
- 83% in Romania (from €0.18bn to €0.33)
- 74% in Iceland (from €1.64bn to €2.86)
- 62% in Croatia (from €0.29bn to €0.47)
- 35% in Bulgaria (from €0.35bn to €0.47)
- 35% in Estonia (from €0.105 to €0.142)
- 26% in Hungary (from €2.99 to €3.76)

The assets are expected to continue growing remarkably also during the following years.

Annex: PensionsEurope Member Associations

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Hektorovićeva ulica 2
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tel: +385 (0)1 644 82 12
www.umfo.hr

Estonia
MTÜ Eesti Fondihaldurite Liit
Luha 34
Tallinn, 10131
Estonia
http://www.efhl.ee/et

Finland
The Finnish Pension Funds
Kalevankatu 13 A 13
00100 Helsinki
Tel: +358 9 6877 4411
www.elakesaatioyhdistys.fi

France
Association Française de la gestion financière – AFG
31, Rue de Miromesnil
75008 Paris
Tel: +33 1 4494 9414
www.afg.asso.fr

Germany
Arbeitsgemeinschaft für betriebliche Altersversorgung – aba
Wilhelmstraβe 138

10963 Berlin
Tel: +49 30 3385811-0
www.aba-online.de

Hungary
National Association of Voluntary Funds
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1051 Budapest
Tel: +361 429 7449
www.penztar-szovetseg.hu

Iceland

The Icelandic Pension Funds Associaton
Gudrunartun 1
105 Reykjavik
Iceland
Tel: +354 563 6450
https://www.lifeyrismal.is/

Ireland
Irish Association of Pension Funds – IAPF
Suite 2, Slane House
25 Lower Mount Street
Dublin 2
Tel: +353 1 661 2427
www.iapf.ie

Italy
Associazione per l' EFRP – AIPE
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www.pensjonskasser.no

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Associação Portuguesa de Fundos de Investimento, Pensões et Patrimónios – APFIPP
Rua Castilho, N° 44 – 2°
PT – 1250-071 Lisbon
Tel: +351 21 799 4840
www.apfipp.pt

Romania
Romanian Pension Funds' Association – APAPR
c/o Sediul ING Pensii
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Tel: +40 21 207 2172
www.apapr.ro

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Asociación de Instituciones de Inversión Colectiva y Fondos de Pensiones – INVERCO
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and

Confederación Española de Mutualidades – CNEPS
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Sweden
Svenska Pensionsstiftelsers Förening (SPFA)
C/O Konsumentkooperationens pensionsstiftelse
SE 106 60 Stockholm
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and

Tjänstepensionsförbundet - C/O Sparinstitutens pensionskassa – SPK
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