



BUILDING EU CAPITAL MARKETS FROM THE BOTTOM UP

ANALYSIS OF POOLS OF LONG-TERM CAPITAL IN THE EU WITH A FOCUS ON PENSIONS

March 2023

By Maximilian Bierbaum

> Building bigger and better capital markets in Europe needs a combination of EU-wide ‘top down’ measures to encourage harmonisation and national-level ‘bottom up’ measures to increase capacity. This report is the first in a new series and identifies the key building blocks for deeper pools of long-term capital in individual EU member states, the starting point for deep and effective capital markets, with a focus on pensions.

Building EU capital markets from the bottom up

Building bigger and better capital markets in the EU requires a combination of 'top down', EU-wide measures to encourage harmonisation and - perhaps more importantly - 'bottom up' measures at a national level to increase capacity. Capital markets union will not be built in Brussels, but in individual member states.

This paper is the first in a series of reports and events that identify the essential building blocks for developing strong capital markets at a national level, analyse how different countries have built successful capital markets in different sectors over the years, and assess the different steps and reforms being taken in different countries.

Deep capital markets provide a more diverse, flexible, and resilient source of funding for the wider economy, but capital markets are nothing without the 'c' - capital. This is why we are starting our 'Building EU capital markets from the bottom up' series with a focus on pools of long-term capital in the EU. They are the starting point for well developed capital markets, and they are a good example of an area of the capital markets that is entirely a national political and social issue.

One of the biggest challenges for capital markets in the EU is that there is not enough long-term capital in the form of pension and insurance assets. Behind the headline numbers, the real problem is not so much with long-term capital in general, but with pensions. Insurance assets, representing two-thirds of long-term capital in the EU, are comparable in scale to other developed economies. This is an important source of long-term capital, but the problem with insurance assets is that there are too many restrictions around the sort of projects they can be invested in.

The thing that can really move the dial is pensions, which in the EU are just a fraction the size of comparable economies. There are a number of economies in the EU with well developed pension systems and high levels of pension assets that can serve as a playbook for other countries to develop their capital markets, but we also recognise that pensions reform is a huge political challenge.

This report's first section discusses the benefits of capital markets and shows the wide range in depth of capital markets across EU member states. The second section takes a look at the levels of pools of long-term capital in the EU, analyses why there should be a focus on increasing the size of pension assets, and discusses the benefits and challenges of pay-as-you-go and funded pensions. We then analyse three groups of countries and their pension systems and outline 10 'building blocks' for a more sustainable pension system: even introducing only some of them can make a real difference in every country across the EU.

We hope this paper provides relevant insights and we are always interested in your thoughts and questions. I would like to thank William Wright for his support and feedback and our members for supporting our work on bigger and better capital markets. Any errors are entirely my own.

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NEW FINANCIAL

Rethinking capital markets

New Financial is a think tank that believes Europe needs bigger and better capital markets to help drive growth and prosperity.

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EXECUTIVE SUMMARY

Here is a short summary of the report:

- 1. From the bottom up:** building bigger, deeper, and more integrated capital markets in Europe requires a combination of EU-wide 'top down' measures to encourage harmonisation and, more importantly, national-level 'bottom up' measures to increase capacity. Bigger and better capital markets will not be built in Brussels but in each and every member state. It is a long-term game and will take decades to become a reality.
- 2. The 'C in CMU':** deep pools of long-term capital such as pension and insurance assets are the starting point for deep and effective capital markets, but pools of capital in the EU are much smaller than in the US, UK, Canada, or Australia. Shifting more savings from bank deposits to investments would deploy more capital to help create jobs, fund innovation, and support wider economic growth in the EU.
- 3. The European pensions problem:** the EU does not so much have a long-term capital problem as a pensions problem. Insurance assets in the EU are roughly comparable in size to other economies and account for nearly two-thirds of the long-term capital in the EU. The real problem is that pension assets - which face far fewer restrictions on what they can invest in - are tiny in the EU. Bigger pension assets could move the dial, but today they only represent 31% of EU GDP, a fraction of the scale in markets like Canada, Australia, or the UK.
- 4. The perfect example:** pensions are a good example of what it means to build EU capital markets from the bottom up: the level of pension assets in any given EU member state is entirely a national political and social issue. There is nothing at an EU level to stop Italy, Spain, or Austria from developing the same sort of pension system and eventually having the same sort of scale of assets as the Netherlands, Denmark, or Sweden.
- 5. The poster children:** it can be politically challenging for EU member states to try and take inspiration from the UK or US. The good thing is that they do not need to: there are plenty of examples of countries in the EU itself that have developed deeper pools of long-term capital. The Netherlands and Denmark together account for more than half of the EU's total pension assets, but only 8% of EU GDP.
- 6. The role model:** pension assets in the Netherlands are more than twice the size of Dutch GDP. Participation in occupational pension schemes is quasi-mandatory, contribution rates are adequately high, management fees are low, and they have a collective approach to risk-sharing. The cross-industry structure of the system means that Dutch pension funds are huge, which significantly increases efficiencies and lowers costs.
- 7. A lot of potential:** relative to GDP, the size of funded pensions in the two largest EU economies - Germany and France - is only a fraction of those in the Netherlands and Denmark. Pension reforms are underway in both Germany and France, but they will likely not move the dial, and more significant changes will be needed.
- 8. Looking east:** there are a number of high-potential markets in the east of Europe, but not all have identified capital markets development as an urgent issue. Poland, for example, has a dedicated capital markets development strategy, whereas recent reforms have left Hungary with an unfunded, pay-as-you-go one-pillar pension system that fully relies on the government budget's ability to pay future retirement incomes.
- 9. Key building blocks:** you cannot copy and paste a pension system from one country to another market, but there are a few common essential building blocks that can make a difference such as starting reforms sooner rather than later; introducing mandatory funded pensions and auto-enrolment; offering good incentives; adopting a collective approach with efficient vehicles; and building political and public support for reform.
- 10. Tough decisions ahead:** there is no silver bullet or magic wand that can create bigger and better capital markets in Europe out of thin air, and we would like to see more debate among national governments, finance ministries, and regulators about the sort of measures individual member states can and should take.

KEY TAKEAWAYS

Pools of long-term capital in the EU

There is a lot of data in this report, and it would be pretty exhausting to read it all in one go. This section provides five key takeaways on the pools of long-term capital in the EU with a focus on pensions.

1. NOT ENOUGH

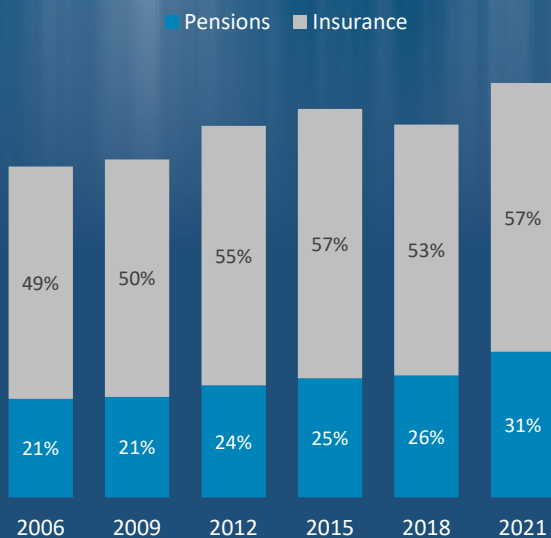
+25%

The growth of long-term capital relative to GDP in the EU between 2006 and 2021

The starting point for deep and effective capital markets is deep pools of long-term capital - but the size of pools of capital in the EU is a long way off where they could and should be.

Relative to GDP, pools of long-term capital in the US are almost three times as large as those in the EU. In the UK, they are nearly one and a half times the EU's size. The most striking difference between the US and UK on the one hand and the EU on the other is the size of pension assets.

The size of pension and insurance assets relative to GDP in the EU between 2006 and 2021



2. A STUBBORN RATIO

2:1

The ratio between insurance and pension assets in the EU

Almost two-thirds of long-term capital in the EU is in insurance assets. While they are an important source of long-term capital, their problem is that there are too many restrictions around the sort of projects they can be invested in.

3. A LONG WAY TO GO

65%

The Netherlands, Denmark, and Sweden's combined share of EU pension assets

The Netherlands, Denmark, and Sweden combined account for nearly two thirds of the EU's pension assets - €3tn in 2021 alone - but only 11% of EU GDP.

4. THE ROLE MODEL

203%

The size of pension assets in the Netherlands relative to the economy

The Dutch pension system is widely known as one of the best developed and most sustainable pension systems in the world, and pension assets in the Netherlands are more than twice the size of Dutch GDP.

5. THE GROWTH OPPORTUNITY

€6tn

The potential size of pension assets in France and Germany

If pension assets in France and Germany were only half as developed as they are in Denmark, they would increase almost tenfold and provide €6tn in long-term savings.

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A complementary role

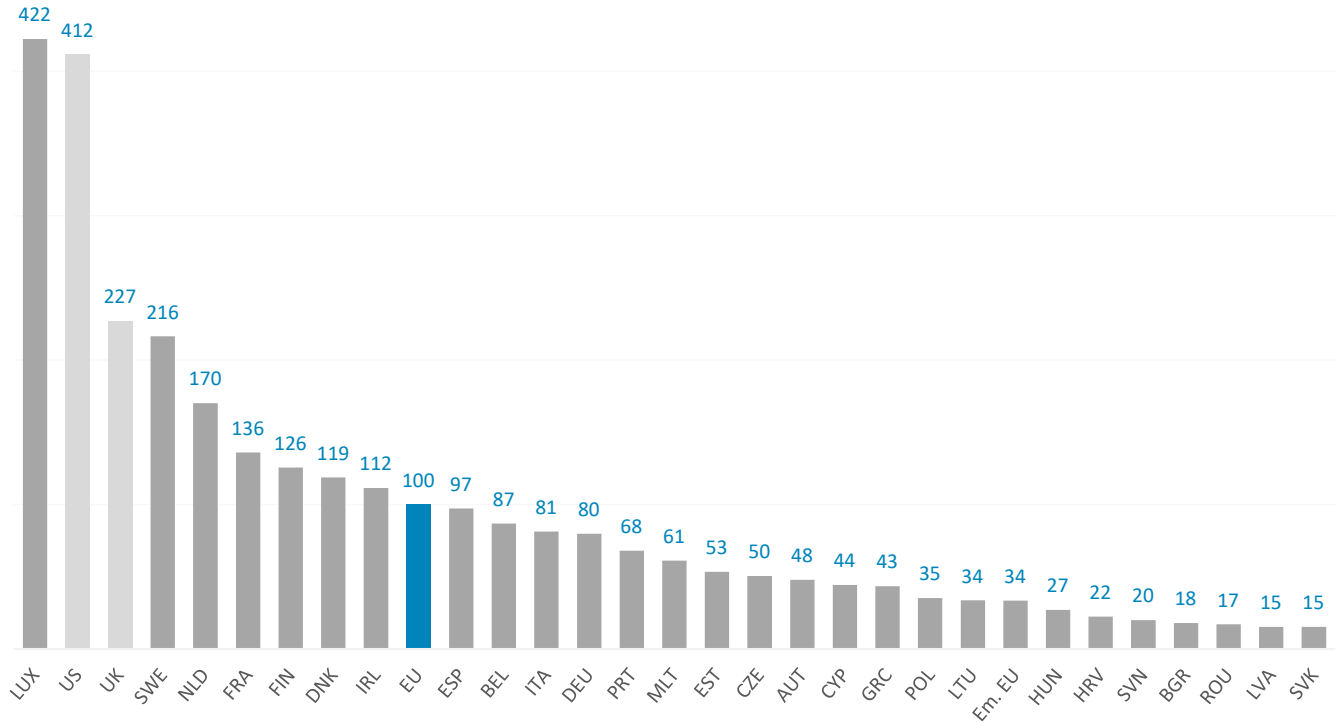
Bigger and deeper capital markets can bring many benefits to the European economy and citizens in terms of investment, jobs, and growth. In the face of current economic challenges, this has become even more urgent. Here is a selection of some of the potential benefits of bigger capital markets in Europe:

1. **A wider range of funding:** capital markets provide a valuable additional source of financing for EU companies that complements traditional bank lending and provides companies with a wider range of sources of potential funding. This reduces the economy's reliance on bank lending and enables companies to diversify both the sources of the capital they use and the term over which they borrow.
2. **Economic resilience:** capital markets help increase the 'shock absorption' capacity of the wider economy during or after a crisis such as Covid or the Russian invasion of Ukraine. The impact of an economic downturn is transmitted less quickly and directly to individuals in economies with more developed capital markets than those that rely more heavily on bank lending, and they tend to recover quicker.
3. **Access to capital:** capital markets offer the right companies the ability to raise a larger amount of capital at a lower cost and for a longer period than borrowing from their bank. Through equity financing, capital markets provide high potential companies - the sort of companies that Europe needs to drive growth, innovation, and jobs - with risk capital that banks are not designed to provide.
4. **Increase bank lending capacity to SMEs:** capital markets are not a realistic option for most SMEs, but wider use of capital markets by companies that are large enough to access them can help free up bank balance sheets and enable banks to focus on lending to smaller companies that need it the most. Freeing up banks to support SMEs is more vital than ever.
5. **Capital allocation and standards:** capital markets improve what economists call the 'allocative efficiency' of capital by effectively crowdsourcing funding to a wide range of investors and channelling investment to those companies that can make the best use of it. The need to compete for capital and be accountable to investors helps improve discipline, operational standards, corporate governance, performance, and transparency.
6. **More flexible:** while capital raising can come to an abrupt halt in the wake of market disruption, capital markets rebound faster than bank lending. The flow of gross new bank lending in the eurozone fell by a nearly third from 2008 to 2021, but issuance in European bond markets has doubled relative to GDP since 2007.
7. **Long-term returns:** markets can be volatile in the short term but investing in capital markets across a range of assets over the long term generates higher returns than keeping savings in the bank, providing a better future income in retirement. Long-term pension savings also reduce the future economic burden on EU taxpayers and government budgets and help address the demographic time bomb faced by many countries in the EU.
8. **Longer-term investing:** capital markets provide long-term investors such as pension funds and insurance companies with a wider range of assets to invest in that better match their liabilities. Annual pension contributions by employers and employees add up to billions a year that can be put to work supporting the economy in much needed areas such as investment in infrastructure and innovation.
9. **Wealth creation:** capital markets democratise wealth creation by enabling a wider range of people to invest in high-growth and successful companies through their investments and pensions, particularly in equity markets. Over time, money that it is invested in capital markets grows faster than money that is deposited in the bank.
10. **Sustainable growth:** Europe needs to invest between €600bn and €1 trillion a year over the next few decades to address climate change and finance the transition to a more sustainable economy. Bank lending and taxation are not enough: capital markets can close this gap by providing capital at scale through a range of instruments.

RANGE IN DEPTH OF EU CAPITAL MARKETS

Fig. I What is the range in depth of capital markets in the EU?

This chart shows the overall average depth of capital markets across 27 different sectors of activity over the three years to 2021. Note: rebased to EU average = 100



Source: New Financial

A wide range

A good starting point to understand the importance of pools of long-term capital in the EU is to have a look at the size of capital markets relative to GDP across member states and at the EU level. We call this the 'depth' of capital markets. The range in depth of capital markets across the EU is far greater than the difference in depth between the EU and the US, or between the EU and the UK. Fig. I shows the wide range in the depth of capital markets across 27 sectors of activity in each country.

Capital markets in the US are roughly twice as big relative to GDP than in the UK, which in turn are more than twice as deep as the EU. Luxembourg still has the deepest capital markets in the EU, mainly because of its role as a regional hub for investment funds and international bond issuance, but in terms of size Luxembourg's capital markets are very small (around 2% of EU activity and just 0.5% of EU GDP).

There are three clear groups of countries in terms of the depth of their capital markets. The first group is made up of wealthier countries in the north west of the EU such as Sweden, the Netherlands, Finland, and Denmark. These countries' capital markets are significantly more developed than the EU average and give an idea of the potential of capital markets union. One of the common factors is that these markets have deep pools of long-term capital.

The countries in the second group have relatively developed capital markets but are less developed than the EU average (between 80% and 100% of the average). In many cases, there is a big disparity between the depth of capital markets and the size of their economy. Three out of the four biggest economies in the EU - Germany, Italy, and Spain - have capital markets that are less developed than the average. And finally, there is a long tail of smaller economies with much less developed capital markets but which have high potential.

AT A GLANCE: POOLS OF LONG-TERM CAPITAL IN THE EU

A long way to go

The starting point for deep and effective capital markets is deep pools of long-term capital - but the size of pools of capital in the EU is a long way off where they could and should be.

Fig.2 shows the size of long-term financial assets in the US, UK, EU, and selected EU member states. Relative to GDP, pools of long-term capital in the US are almost three times as big as those in the EU. In the UK, they are nearly one and a half times the EU's size.

The most striking difference between the EU and comparable markets is the size of pension assets. Relative to GDP, insurance assets in the EU are bigger than in the US and not far short of the UK. But pension assets in the EU at just 31% of GDP are only a fraction the size of comparable markets such as Australia, Canada, the UK, or the US.

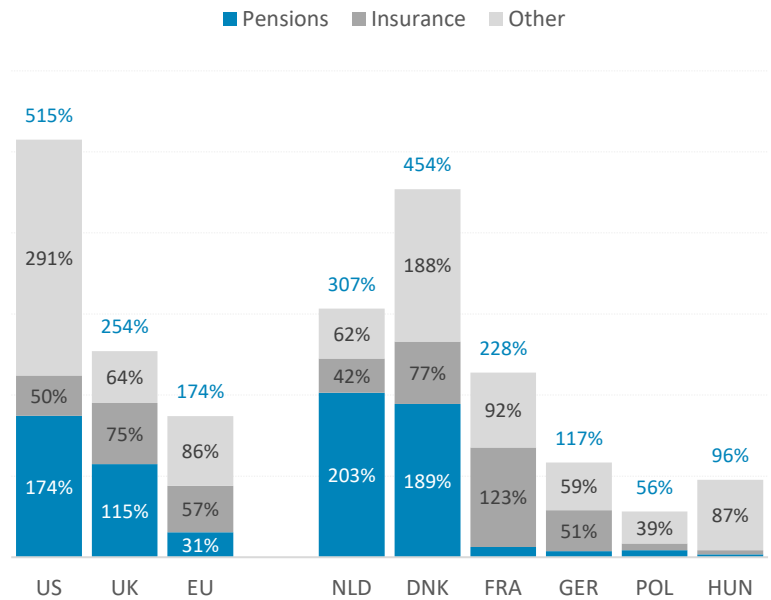
There are a few EU member states where pension assets are as big (or bigger) relative to the economy as they are in the US or in the UK, for example the Netherlands and Denmark, and there is no reason why in the long run they should not be as developed in other European economies.

Fig.3 shows the significance of deep pools of long-term capital when it comes to the development of capital markets. There is a strong correlation between the size of pension and insurance assets relative to GDP and the development of capital markets in EU economies, the US, and the UK.

There is an obvious need to develop bigger pools of long-term capital in the EU, but the question of how to get there when most of the savings of Europeans are in bank accounts or property is harder to answer. The EU needs a culture change for Europeans to invest more via their pensions, their life insurance products, and also via direct retail participation. Reforms at member-state level can help drive this change, and a good place to start is to focus on pensions reform.

Fig.2 What is the size of pools of long-term capital?

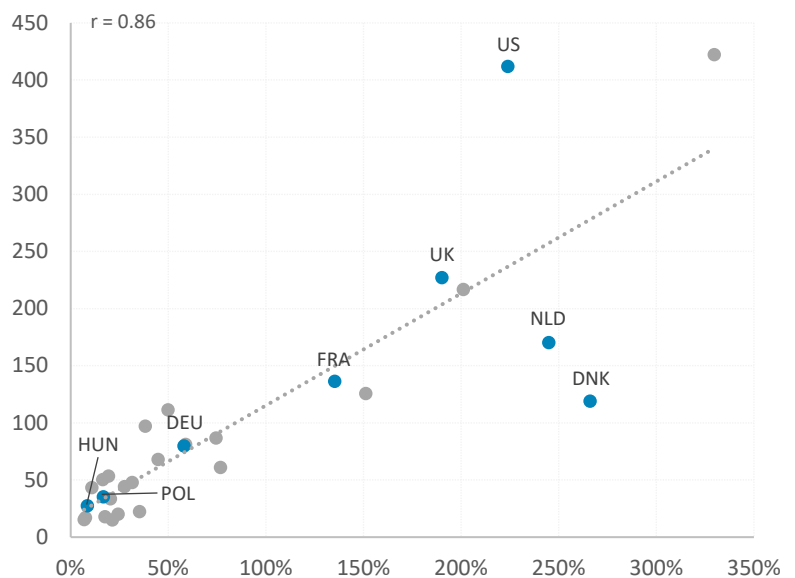
The size of long-term pools of capital in % of GDP in 2021 in the US, UK, EU, and selected EU member states, with the number in blue showing total size
 Note: 'other' includes direct investments in funds, stocks, and bonds



Source: US Treasury, ONS, ECB, OECD, Insurance Europe, New Financial

Fig.3 Pools of long-term capital and capital markets development

The correlation between the size of pension and insurance assets in % of GDP (x-axis) and capital markets depth (y-axis) in the EU, US, and UK in 2021



Source: US Treasury, ONS, ECB, OECD, Insurance Europe, New Financial

The European pensions problem

Deep capital markets provide a more diverse, flexible, and resilient source of funding for the wider economy than bank lending alone, but capital markets are nothing without capital.

One of the most striking, but perhaps unsurprising, aspects of capital markets in the EU is that the size of the economy does not always translate into size of pools of long-term capital. This is particularly true when it comes to pension assets.

Fig.4 shows the distribution of pension assets in the EU in 2021. The Netherlands, Denmark, and Sweden account for nearly two-thirds of the EU's pension assets despite representing only 12% of GDP. Germany, France, Italy, and Spain make up 63% of EU GDP, but only around a fifth of pension assets. The remaining 20 member states account for a quarter of EU GDP, but only an eighth of pension assets.

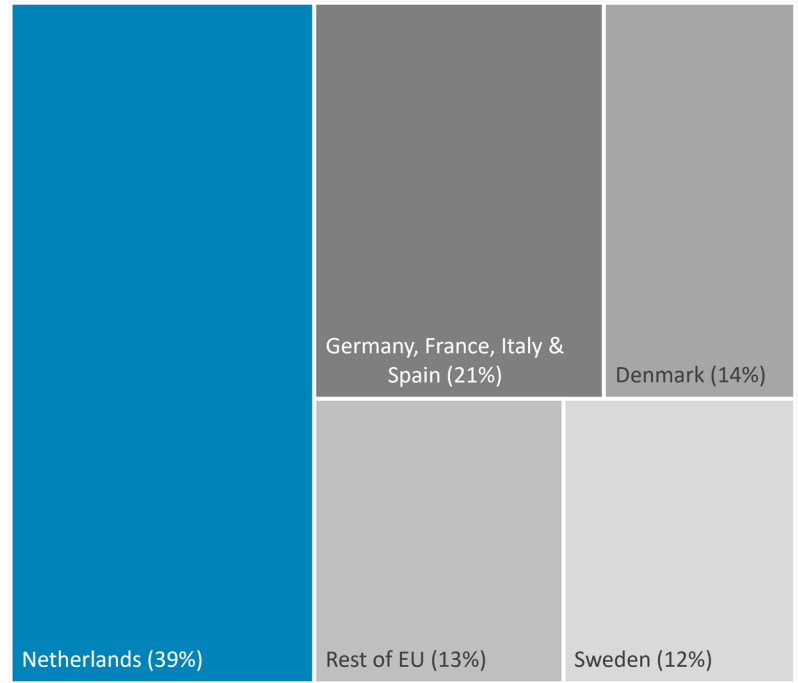
Fig.5 explains one part of the problem. Of the long-term capital in the EU, almost two-thirds is in insurance assets. While insurance assets are an important source of long-term capital, the problem is that there are too many restrictions around the sort of projects they can be invested in. The thing that can really move the dial is funded pensions.

The size of pensions in different corners of the EU reflects the wide range in the development of capital markets across member states. This shows that while EU-wide 'top down' measures to encourage harmonisation in European capital markets are much needed, they are only part of the solution. National-level, 'bottom up' measures to increase capacity are equally, if not more, important.

Not every measure would make sense in every country: what works in Denmark, for example, will not necessarily work in Slovenia. But identifying the key building blocks for growing pools of long-term capital, and in particular pensions, can provide member states with a playbook to help develop their capital markets.

Fig.4 How are funded pension assets in the EU distributed?

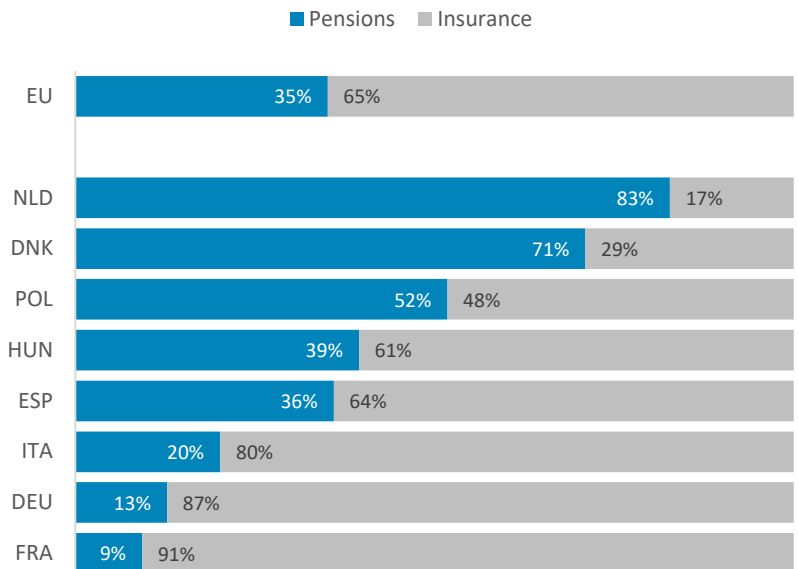
The distribution of the EU's funded pension assets in % in 2021



Source: OECD, New Financial

Fig.5 What is the ratio between pension and insurance assets?

The ratio between pension and insurance assets in the EU and selected member states in 2021



Source: OECD, Insurance Europe, New Financial

The challenges (and upsides) of pay-as-you-go

Pay-as-you-go was the go-to pension model in many countries and provided many pensioners with a good retirement income. But lately, the model has come under pressure. Here are some of the challenges and upsides of pay-as-you-go:

1. **Changing demographics:** pay-as-you-go pensions only work when contributions by younger generations are sufficiently high to meet the pension promises made to older generations. These promises are more and more at risk. Today, there are three adults of working age for every pensioner in the EU. By 2050, there will be less than two workers for every pensioner. Pay-as-you-go pension systems can be stabilised by increasing contribution rates or retirement age, or lowering retirement incomes, but all of these are unpopular measures.
2. **Very expensive:** another way to stabilise pay-as-you-go pensions is using public funds, but this creates an even bigger economic burden on taxpayers and government budgets. Germany's public pension expenditure is already 10.4% of GDP and set to increase; in France, it is 14.5% against the OECD average of 7.7%. At the same time, replacement rates in Germany (at 53% net) and France (at 74% net) are relatively low.
3. **Political risk:** since most pay-as-you-go pensions are government-run, they are sensitive to changing political environments. There usually is no guarantee that contributions made today will lead to a certain retirement income in the future as politicians will always need to respond to developments such as demographic change.
4. **Not invested:** there is a lot of notional money in pay-as-you-go systems, but it is not being used productively. Funds do not support jobs and innovation, and pension pots are only indirectly linked to economic growth.
5. **Safety net:** on the plus side, pay-as-you-go pensions are less dependent on the financial markets or an individual's lifetime career and are ideal to provide a safety net and a basic retirement income in later life.

The benefits (and risks) of funded pensions

The alternative model to pay-as-you-go pensions is funded pensions where contributions are not immediately redistributed to current pensioners but saved and invested to build a fund that can be withdrawn in retirement. Funded pensions provide a lot of benefits, but they also come with some risks:

1. **Better retirement incomes:** the Netherlands (at 85% net) and Denmark (at 84% net) have some of the highest pension replacement rates of all OECD countries. Designed in the right way, funded pensions can provide higher retirement incomes to pensioners while reducing public pension expenditure.
2. **Productive capital:** annual pension contributions add up to billions of euros a year that can be put to work supporting the economy in much needed areas such as investment in infrastructure and innovation. Through their investments, savers and pensioners directly benefit from economic growth.
3. **Lower taxpayer burden:** long-term pension savings reduce the future economic burden on EU taxpayers and public budgets and free up money that governments can use in areas where it can make a real difference, for example increasing basic state pensions provided to people on lower incomes with lower savings.
4. **Resilient:** pension savings that are invested in a diversified way and allocated across various asset classes and geographic regions are less susceptible to economic shocks that can hit a country's government budget and affect current and future pension levels.
5. **Market fluctuations:** investments in the capital markets always come with a risk. Asset values go up and down, and a global economic shock shortly before retirement can significantly reduce a person's pension pot. At the same time, things can bounce back quickly: after the 2007-2008 global financial crisis, it took Dutch pension assets only a little more than three years to recover to pre-crisis value levels.

ANALYSIS: LEADING BY EXAMPLE

Bigger than many think

When it comes to the development of capital markets, it can be politically challenging for EU member states to seek inspiration from the UK or the US. The good thing is that they do not need to. It would be just as useful to take a look at what other economies in the EU - like the Netherlands and Denmark - are doing to develop deeper pools of long-term capital.

The Netherlands and Denmark are two of only three 'A'-rated pension systems in Mercer's annual global pension index (the third is Iceland.) Together, they account for more than half of the EU's total pension assets - €2.5tn in 2021 alone - but only 8% of EU GDP. Both systems started many decades ago and are quasi-mandatory fully funded pension systems based around industry-wide pension schemes.

The Dutch pension system started in the 1950s and is based on strong occupational pensions that provide a large, funded pension pot to supplement state and private pensions. The government can make participation in a scheme mandatory for entire sectors or professions, and almost 90% of workers in the Netherlands are covered by occupational pension schemes.

The Danish pension system has a very similar structure that was introduced in 1964. Denmark's fully funded pension covers virtually all employees and those on benefits, where contributions that would otherwise be paid by the employer are paid by the state. Today, ATP is one of the world's largest pension funds, and Denmark's largest five pension schemes account for more than half of Danish pension assets.

In both countries, employer contributions make up the majority of pension contributions, with about two-thirds of contributions coming from employers. In the Netherlands, contribution rates average around 30% of gross salaries and add up to a lot of money that gets invested and is put to work supporting the economy in much needed areas such as infrastructure and innovation.

Fig.6 What is the value of pension assets?

The size and growth of pension assets from 2006 to 2021 in the Netherlands and Denmark, €bn

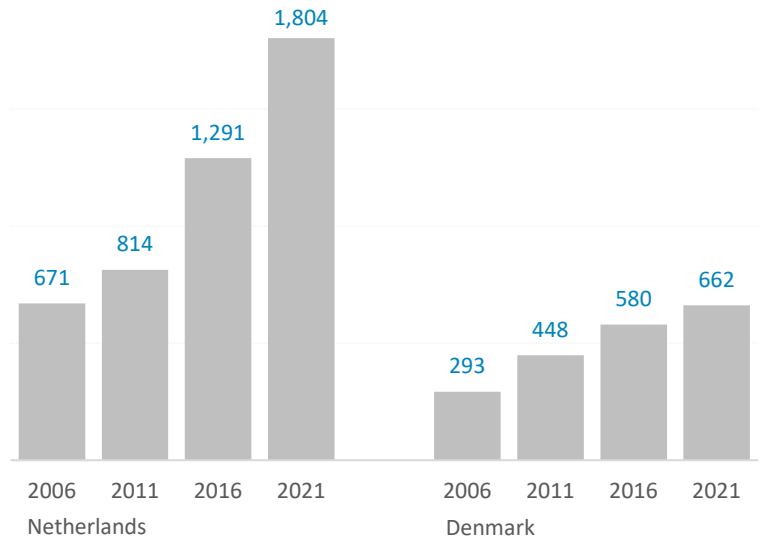
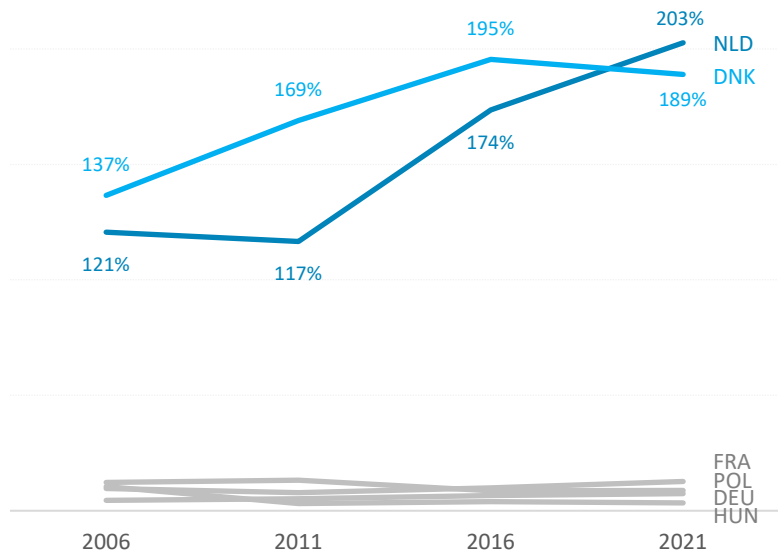


Fig.7 What is the size of pension assets relative to the economy?

The size of pension assets in % of GDP from 2006 to 2021 in selected EU markets

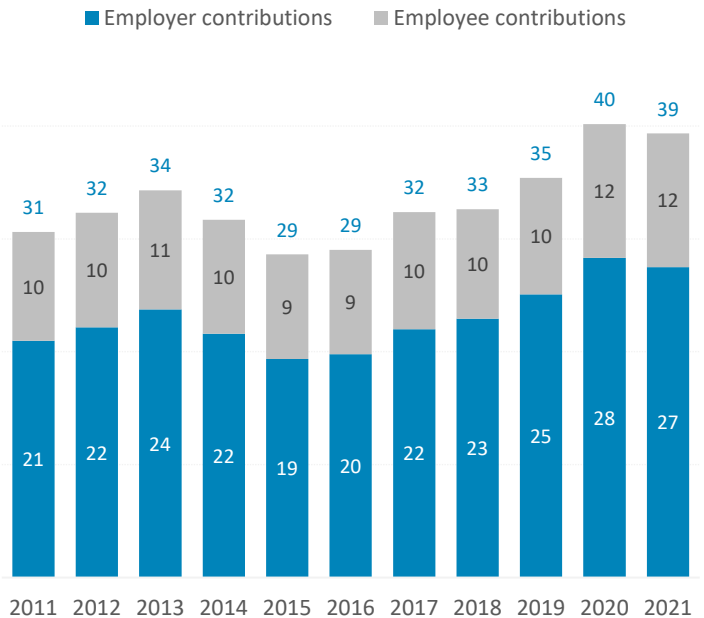
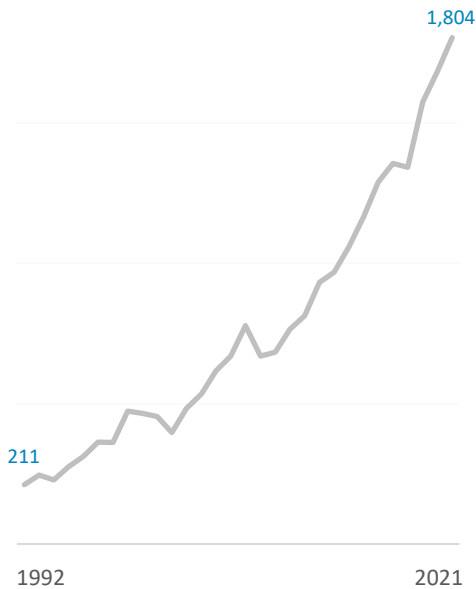


Source: OECD, New Financial

Fig.8 How did pension assets in the Netherlands develop over time?

i) The development of pension assets in the Netherlands from 1992 to 2021 in €bn

ii) Pension contributions in the Netherlands from 2011 to 2021 in €bn, with the figure in blue showing total contributions



Source: OECD, De Nederlandsche Bank, New Financial

The role model

The combination of a strong pay-as-you-go state pension with fully funded occupational pensions makes the pension system in the Netherlands sustainable and resilient. Here are a few of the key elements of the Dutch second pillar:

- A lot of time:** Dutch pension plans were set up in the 1950s, and the general structure of the second pillar remains the same today. This has given Dutch pension funds around 70 years to invest and accumulate savings, and allowed Dutch pensioners to benefit from wider economic growth.
- Collectivity and risk-sharing:** one of the system's most important aspects is the size of the Dutch pension funds. There are only a few hundred, the biggest schemes cover whole industries or professions, and the largest funds are very large indeed: the top seven industry schemes account for 62% of all Dutch pension assets. This allows for solidarity and collective risk-sharing between individuals and generations. It also significantly increases efficiencies and lowers costs.
- Quasi-mandatory:** it is not compulsory for people in the Netherlands to have an occupational pension - in theory. In practice, the Dutch government has the right to make a pension scheme mandatory for entire sectors or professions, and 80% of all occupational scheme members are covered by such mandatory pension funds.
- Not-for-profit:** pension funds in the Netherlands operate on a not-for-profit basis which keeps costs under control.
- Not perfect:** the Dutch pension system is not perfect and is being reformed. From this year, while the general principles of collectivity and risk-sharing will broadly remain, pensions will become more personalised through a shift from defined benefits to defined contributions and through individual investment strategies rather than the current 'one-size-fits-all' approach. Reforms also aim to open second-pillar pension schemes to the self-employed and others in non-standard forms of work.

A lot of potential

Funded pensions reduce the future economic burden on EU taxpayers and government budgets and help address the demographic time bomb faced by many countries in the EU.

Relative to the economy, the size of funded pensions in the two largest EU economies - Germany and France - is only a fraction of those in the Netherlands, Denmark, or Sweden. This is because a large share of German and French long-term savings is in insurance, not pensions. In 2021, France and Germany combined accounted for nearly half of the EU's GDP, but only 10% of EU pension assets.

To address this challenge, Germany is about to introduce a pension fund modelled after the Swedish 'premium pension'. The 'Aktienrente' fund will invest in global equities and use returns to supplement Germany's state pension. Initially, Germany will invest a one-off €10bn in the capital markets. This is a good first step but will likely not be enough to stabilise Germany's state pension in the long run.

France has a three-pillar pay-as-you-go pension system. Annual contributions are immediately redistributed to current pensioners, not invested. A reserve fund (the FRR) was established in 1999 to support France's state pension, but it is funded via tax income, not contributions. France's current controversial pension reform is aiming to address issues such as the country's retirement age, but it would not change the system's fundamental design.

Employers in France can offer voluntary occupational pension schemes in the form of tax-efficient, long-term saving plans that can be paid out as a lump sum or as annuities on retirement, but take-up so far has been relatively low.

The two economies have a lot of potential: if pension assets in France and Germany were only half as big relative to the economy as they are in Denmark, they would increase almost tenfold to around €6tn in long-term savings.

Fig.9 What is the value of pension assets?

The size and growth of pension assets from 2006 to 2021 in France and Germany, €bn

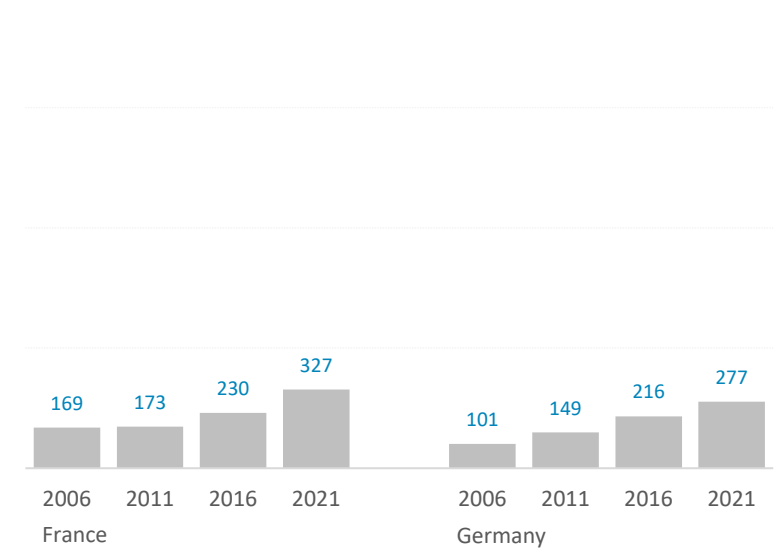
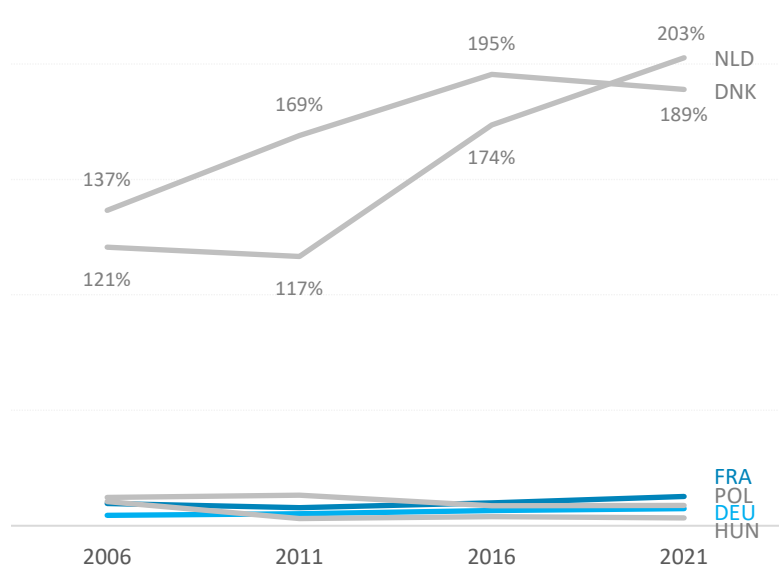


Fig.10 What is the size of pension assets relative to the economy?

The size of pension assets in % of GDP from 2006 to 2021 in selected EU markets



Source: OECD, New Financial

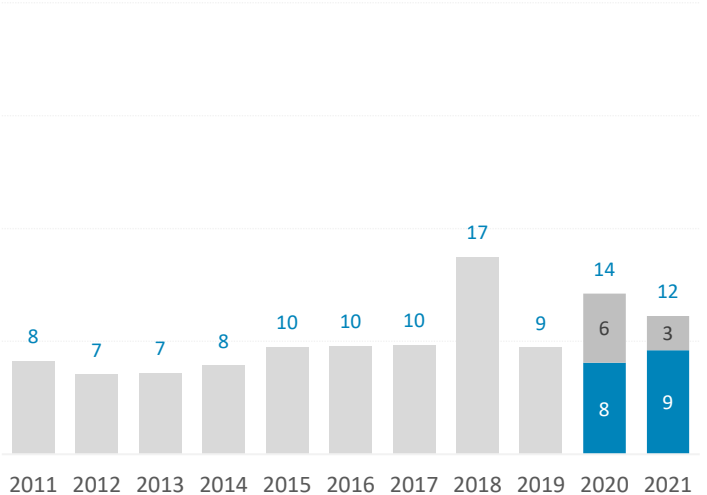
Fig. I I How did pension assets in Germany develop over time?

i) The development of pension assets in Germany from 1995 to 2021 in €bn

ii) Pension contributions in Germany from 2011 to 2021 in €bn, with the figure in blue showing total contributions

Note: employer / employee split available from 2020

■ Employer contributions ■ Employee contributions



Source: OECD, New Financial

Not enough

Considering that Germany effectively invented modern pensions in the late 19th century, it is a little surprising that they have fallen behind, and that Germany's pension system is still heavily reliant on its pay-as-you-go state pension. Here are three reforms that Germany introduced in recent years to support the build-up of funded pension pots:

- 1. The 'Riester-Rente':** Germany lowered state pension benefits in the early 2000s and introduced the Riester private pension scheme to help people make up the difference. Contributions up to a certain level are exempt from income tax, and the government pays a bonus into Riester pension pots if savings reach 4% of a person's annual income. But due to a lack of collectivity and size, and because Riester pension pots come with a guarantee, running a Riester scheme is costly and annual management charges are often higher than the bonus people receive from government.
- 2. The 'act to strengthen occupational pensions':** in 2018, Germany allowed occupational pensions to operate as defined contributions schemes (under certain conditions). Workplace pensions are not compulsory in Germany and the change in regulation aimed to make it more attractive for employers to offer them. Employees can contribute via tax-efficient salary sacrifice, and employers must contribute another 15% of the employee's contribution amount. Still, less than two-thirds of all employees in Germany participate in voluntary occupational pension schemes.
- 3. The 'Aktienrente':** the ongoing Aktienrente ('share pension') reform is a step in the right direction and will introduce a pension fund that will invest in global equities and use returns to supplement Germany's state pension. It is not funded via contributions, however, and its initial size of €10bn will very likely not make a huge difference. The German finance ministry often refers to the Swedish pension system as 'best practice' and would like to model the 'Aktienrente' after the Swedish first pillar with a small percentage of contributions being allocated to the fund, but the plan is facing a lot of political opposition from trade unions and even from within Germany's coalition government.

Different approaches

There is a long list of smaller economies in the EU where capital markets are not yet as developed and where pools of long-term capital have a lot of room to grow. Not all of these economies have identified capital markets development as an urgent issue, however, and there are some that are taking steps backwards.

Of the EU11 countries, Poland has one of the most developed capital markets. This did not happen by accident: in 2019, Poland published its 'capital market development strategy' which it developed in cooperation with the European Bank for Reconstruction and Development. The strategy identifies 90 actions to remove barriers and grow Polish capital markets.

One of the key objectives of the strategy is to increase long-term savings in Poland. But when it comes to pensions, the strategy lacks detail. It mentions that existing, private pension schemes in Poland should be made more attractive through tax incentives, but does not outline specifics or discuss more ambitious reforms such as reversing the cap on contributions to second-pillar pensions introduced in 2011.

Hungary has recently taken a step backwards. In 2010, the country disbanded its mandatory, funded second pension pillar and forced the transfer of all assets to the state. One of the reasons that were presented for why this measure was taken was that the government had lost trust in private pension funds after the 2008 financial crisis to manage people's savings.

This has left Hungary with an unfunded, pay-as-you-go one-pillar pension system that relies on government budget's ability to pay retirement incomes. It is unsurprising that pension assets in Hungary now are among the lowest in the EU in both absolute and relative terms.

Both examples show that any building blocks for developing capital markets in the EU can only work if they have full political support, if the value for money is clear, and if people and institutions trust financial markets.

Fig.12 What is the value of pension assets?

The size and growth of pension assets from 2006 to 2021 in Poland and Hungary, €bn

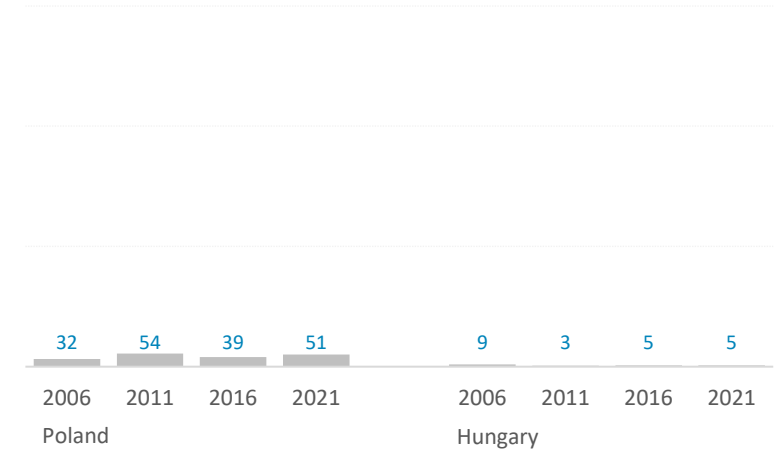
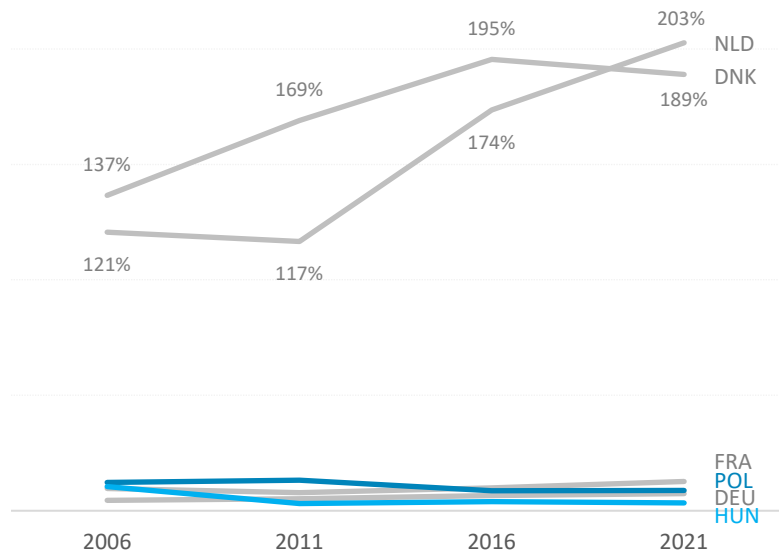


Fig.13 What is the size of pension assets relative to the economy?

The size of pension assets in % of GDP from 2006 to 2021 in selected EU markets



Source: OECD, New Financial

Time for more ambition

No single European pension system can be easily boxed up and shipped for installation in another market. Each system in each member state has evolved around different economic, cultural, philosophical, and political needs. That said, here are ten essential building blocks that would provide a solid foundation for a more sustainable and healthier pension system. Even introducing only some of them can make a real difference in every country across the EU:

1. **Compulsory funded pensions:** one of the most important building blocks is the introduction of compulsory funded pensions. Not every European member state has a multi-pillar pension system in the first place, and those that do often treat contributions to funded pensions as voluntary. Pay-as-you-go systems have their own merit, but with demographics changing, they are becoming a ticking time bomb.

Sweden's pension system is a good example due to the unique design of its pillar-one state pension: since 1998, 2.5% of the pensionable income is allocated towards the so-called 'premium pension' and paid into individual investment accounts to build up a funded pension pot. At retirement age, funds can be withdrawn or converted into a traditional insurance plan.

2. **Auto-enrolment:** one way to build up pension pots even quicker is to automatically enrol people in workplace pensions (where they are voluntary) and require both employers and employees to make contributions to an employee's workplace pension. The UK introduced mandatory auto-enrolment in 2012; Ireland will introduce a similar system in 2024 and is expecting total savings to amount to around €25bn after ten years - a little more than €33,000 per worker - with the figure not including investment returns.

People can opt out under certain conditions, but the barrier is high because it requires an active choice, and most people remain in schemes.

3. **Staggered contributions:** you cannot switch to 20% pension contributions overnight - this would lead to a lot of resistance from both employers and employees, particularly during a cost-of-living crisis. Starting small is key: a few percent each for employers and employees, increasing every few years, ideally to 20% combined, but at least to 10%. Auto-enrolment in Ireland will be gradually phased in over a decade, with both employer and employee contributions starting at 1.5% each, and increasing every three years by 1.5 percentage points until they eventually reach the maximum contribution rate of 6% (12% combined) by year ten.
4. **Timing:** the best time to introduce funded pensions was decades ago, the second best time is now. Dutch pension plans were set up in the 1950s, and the general structure of the second pillar remains the same today, while the Danish system dates from the 1960s. This has given Dutch and Danish pension funds more than 50 years to invest and accumulate savings, and allowed pensioners to benefit from wider economic growth.

While a long time horizon is crucial, it is not a reason for other member states not to think about pensions reform now: it took the UK 30 years to go from pension assets at 20% of GDP to more than 100%.

5. **Structure:** the size of pension funds in markets such as Denmark and the Netherlands is another reason for the success of their pension systems. They are dominated by a handful of large, industry-wide funds. Each fund has thousands or hundreds of thousands of members, receives billions of euros in annual contributions, and invests in a wide range of assets. This structure enables solidarity and collective risk-sharing between individuals and generations, and increases efficiencies and lowers costs. The downside of the UK system is that you end up with thousands of small schemes that are less cost-efficient.

In addition, pension funds in the Netherlands operate on a not-for-profit basis which is another reason for why costs are kept under control, and savers and pensioners benefit from low management and product charges.

- 6. Good incentives:** for many, 'retirement' is a distant concept. Young people in particular are the ones whose actions and choices will have great impact later, but who often need every little bit of extra income now. They need a good reason to lock away a part of their earnings for a very long time. 'Free money' can be that powerful incentive: any pension contributions and returns should be exempt from income tax.

Spain recently introduced reforms to boost participation in occupational pensions by providing more generous employer tax breaks, relaxing employee contribution limits, and capping the maximum waiting period before an employee can participate in a scheme at one month. The reforms in particular aim to get those on lower incomes to join workplace pension schemes and offer the most generous incentives to employees with an annual income of less than €27,000.

- 7. A good basis:** funded pensions can be beneficial to a lot of people, but those on lower incomes with not a lot of savings might need some extra help. The money that is freed up from government budgets by introducing a system of funded pensions should be used to establish a state pension under pillar one that provides a basic retirement income to everyone who has lived in a country long enough.

The Netherlands (again) are a good example for this: the Dutch AOW pension is paid to everyone living in the Netherlands once they have reached the qualifying age. Every resident accrues 2% of their AOW pension every year for 50 years, and they do not have to be (or have been) in paid work to do so as the AOW pension is funded from tax revenues. It is in most cases supplemented with income from other pillars, but provides a good basic retirement income.

- 8. Better financial literacy:** too often, the debate around pensions is too removed from people's everyday lives. In a world that is moving from defined benefits to defined contributions, people need to make more active choices regarding their pensions, but many lack the skills and knowledge to do so.

In the longer term, a healthy economy and vibrant capital markets in Europe need millions of individuals to engage more with their money and feel more empowered and financially resilient. This sort of engagement cannot be wished out of thin air, particularly in the midst of a cost-of-living crisis. A system of financial health checks (that we explored in a concept paper [last year](#)) would help address this problem from the bottom up over the course of people's lives.

- 9. Accessibility:** another good starting point to make people more engaged when it comes to their pension would be to talk about retirement income not in terms of abstract numbers ('a good pension should be two-thirds of your working salary') but in terms of lifestyle ('here's what you'll need for a comfortable retirement lifestyle, and here's a few specific examples of how a comfortable lifestyle might look like').

This would make the effect of smaller or bigger pension pots much more tangible and create a direct link between what people are saving today and what they want life to be like later on. The [ASFA Retirement Standard](#) does this well.

- 10. Political support:** building bigger and better capital markets in Europe is a long, complex, and technical project, but above all, it is a political project. The form of each member state's pension system is a product of many factors, but no reform - and in particular, no ambitious reform - will be successful without widespread political support. Hungary disbanding its second pillar is an excellent example for this: the right structure was in place, but it was lacking support from policymakers and the wider public.

One way of better engaging politicians and securing that support would be a new narrative that frames the value of capital markets - the backbone of funded pensions - in terms of the impact they have on the wider economy and on millions of people in every corner of the EU. We published a [rough guide](#) on this last year.

Driving growth from the bottom up

The key message of this series of reports is that bigger and better capital markets in Europe will only happen if the EU successfully introduces 'top down' measures at an EU level to improve harmonisation *and* individual member states complement this with 'bottom up' initiatives to increase capacity. Here is a selection of questions for national governments, finance ministries, and regulators to encourage debate about what measures individual member states could take:

- 1. Access to funding:** do companies in your country who want and need capital to invest in their business have sufficient access to a diverse range of short- and long-term funding? How reliant are companies on bank lending? Are banks in your country healthy enough to provide that funding over the course of an economic cycle? And what other sources of funding could step in to fill that potential gap?
- 2. Savings vs investments:** how much of your citizens' financial assets are held in bank savings and how much is invested? Are you confident that bank savings are the best way to help drive long-term wealth creation particularly in a new world of higher inflation? What would be the potential impact (including the benefits and trade-offs) if a significant part of those savings were moved into other forms of investment?
- 3. Pensions:** how sustainable is your pension system across all three pillars (state, workplace, and private pensions)? What is the balance between pay-as-you-go and funded pensions and how does that compare with other EU member states? What measures could you take over 25 years to shift that balance? What impact would it have on your economy and public finances if more people were making annual contributions to their pensions and building a bigger pool of long-term capital that could be invested in your economy?
- 4. Market infrastructure:** is your market infrastructure (stock exchanges, settlement, clearing etc) appropriate for an economy and market of your size? What barriers - if any - does your market infrastructure present to the future development of your financial markets and to cross-border investment in your economy?
- 5. Venture capital & risk capital:** do high potential companies in your country that could drive job creation have enough access to early-stage risk capital? Do they have sufficient access to other sources of risk capital, and if so, which sources? Is the level of equity funding through the stock market and IPOs in your economy sufficient to meet demand? And are there measures that you could take to boost supply and demand?
- 6. Cross-border investment:** how important is cross-border investment to your economy? Can domestic sources of capital provide all the funding your economy needs? What barriers - if any - do your tax, regulatory, and legal systems present in terms of your economy's attractiveness to foreign investors?
- 7. Regulation:** how well regulated is your economy and your financial system? On what metrics? How does this compare to other countries in the EU and the rest of the world? What barriers - if any - does your regulatory system and implementation of EU law present to growth and investment?
- 8. Tax:** what is the balance in your economy between the taxation of labour and capital, and between debt and equity? Do you have any tax measures that implicitly or explicitly disincentivise investment? Without fundamentally changing your tax system, are there changes you could make to incentivise more investment? If so, which countries could provide examples of what does and does not work?
- 9. Legal system:** how comfortable are you with where your country ranks in international rankings of the rule of law, complexity, and timeliness of legal process, and issues such as corruption and transparency? What barriers does your legal system present in terms of investment and growth and cross-border flows of capital?
- 10. Regional cooperation:** how could regional cooperation with other EU member states help boost your economy? What form might this co-operation take in the banking and finance sector? Do you have the right systems and structures in place to encourage and facilitate this sort of cooperation?

NEW FINANCIAL

Rethinking capital markets

Lead author



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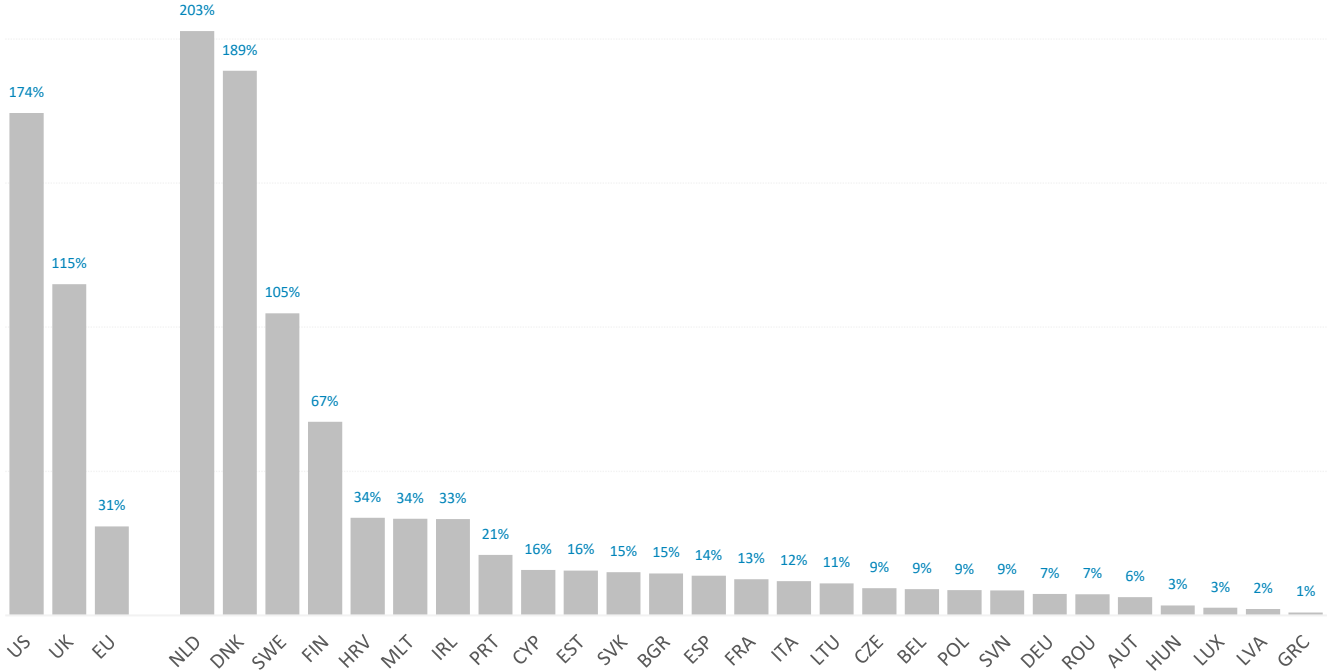
[*An introduction to financial health checks*](#)

[*A new vision for EU capital markets*](#)

APPENDIX

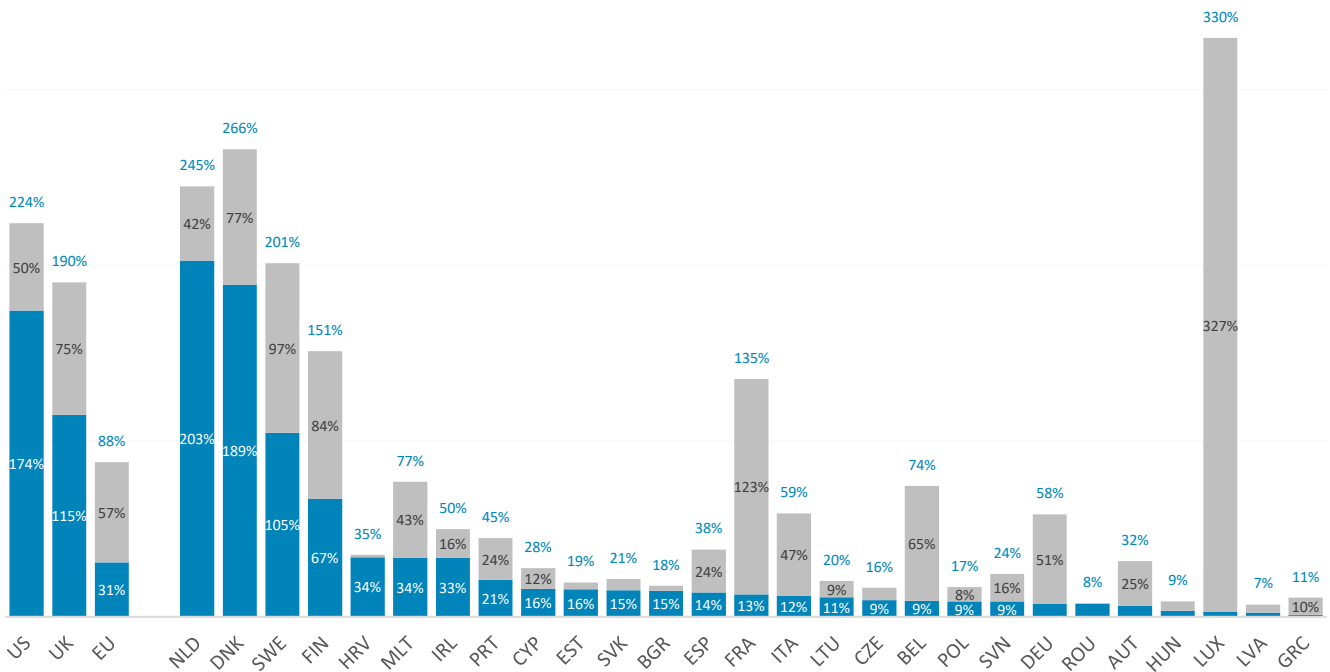
Fig. I4 What is the size of pools of long-term capital across the EU?

i) This chart shows the size of pension assets relative to GDP in the US, UK, EU, and all EU member states in 2021.



ii) This chart shows the size of pension and insurance assets (and their combined value in blue) relative to GDP in the US, UK, EU, and all EU member states in 2021.

■ Pensions ■ Insurance



Source: OECD, New Financial