European Stability Mechanism

Capital markets union redux: towards a deeper and more accessible savings and investments union

Europe faces massive investment needs: it must regain competitiveness, provide stability to its ageing population, and confront climate change and external threats. This has renewed the urgency of the decade-old European Union (EU) project for a capital markets union (CMU). CMU is a cornerstone of the EU strategy to reduce longstanding barriers to integration, while achieving greater economic resilience and mitigating the risk of future crises. By strengthening its financial infrastructure and fostering an integrated financial market, CMU will enable a more efficient matching of savings and investments domestically and across borders. Our contribution to the policy discussion focuses on unleashing the potential of retail investors and small entrepreneurs to make better use of European capital markets, reducing their dependence on banks. We examine the profile of European retail investors and discuss measures that have proved effective in enhancing household participation in capital markets and fostering cross-border investments. We argue that wider access to equity and equity-like instruments is essential for providing the capital needed for growth and for financial stability. We also point to the enhanced role that banks can play through the securitisation of loans for small and medium-sized enterprises (SMEs). These elements would help to convert CMU into a savings and investments union (SIU) for people and firms.

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Foreword

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Equity, equitable, and equilibrium: three pivotal concepts in economics that pertain, for many, to distinct spheres of economic life. Equity often conjures images of stock market booms and crashes, of risky entrepreneurship. Unfortunately, many Europeans still perceive company ownership as a privilege reserved mostly for the wealthy and financially savvy. In contrast, equitable evokes the concept of sharing resources and opportunities, an ideal frequently highlighted in political discourse as being at odds with the interests of firm owners, that is, of equity holders. Equilibrium, a more academic concept, refers to a state of the economy where the forces of supply and demand are in balance.

Despite their apparent disparities, these three terms share a common Latin root: *aequus*, meaning 'fair' or 'even, or balanced'. There is fairness in the private ownership of companies, as equity holders share evenly in both the profits and losses. There is also fairness in striving for a more egalitarian society where financial assets are owned by a broader cross-section of the population. Furthermore, the economy finds its balance when demand meets supply.

In this discussion paper, the authors argue that the benefits from the completion of Europe's CMU can be encapsulated through these three concepts with a common root:

- Better access to equity and equity-like instruments is essential for providing the capital for innovation and growth needed in Europe — a call pointedly voiced by Mario Draghi, Enrico Letta, and Christian Noyer in their recent reports.
- More equitable access to financial markets ensures that a broader cross-section of society can benefit from a savings and investments union (SIU) by taking advantage of economic opportunities and planning for future retirement. It would also render equity markets more stable by widening the investor base.
- Broader retail participation in capital markets will let European households benefit from higher returns on their savings while European firms will gain access to a wider range of financing sources for productive investments. Combined, this has the potential to shift the European economy onto a higher growth trajectory, a new equilibrium better capable of facing internal challenges, such as demographic changes and the green and digital transitions, while also responding to external threats.

In sum, the common root of these three concepts — equity, equitable, and equilibrium — is a powerful symbol of how the completion of the CMU project would facilitate a mutually beneficial shift. By unlocking capital markets for everyone, it can become truly a savings and investments union for the common good.

Acronyms and abbreviations

EU	European Union
CMU	Capital markets union
GDP	Gross domestic product
GACS	Guarantee on Securitisation of Bank Non-Performing Loans (*Garanzia sulla Cartolarizzazione delle Sofferenze*)
HAPS	Hellenic Asset Protection Scheme
IORP	Institutions for Occupational Retirement Provision
IPO	Initial public offering
ISK	Investment savings account (*Investeringssparkonto*)
OECD	Organisation for Economic Co-operation and Development
PAYG	Pay as you go
PEA	Share savings plan (*Plan d'Épargne en Actions*)
PIR	Individual savings plans (*Piani Individuali di Risparmio*)
SME	Small and medium-sized enterprise
UK	United Kingdom
US	United States

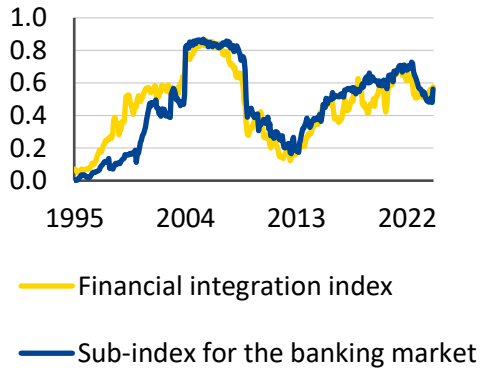
Introduction

Why CMU matters for financial stability and for the ESM

The EU CMU initiative aims to create a single capital market to increase access to financing for firms, investment opportunities for households, and economic stability across the EU. By improving risk-sharing and resource allocation, CMU can support growth and provide increased macroeconomic stability. However, a complete CMU remains elusive and financial markets in the euro area remain fragmented. Integration within the euro area has ebbed and flowed substantially and remains below its mid-2000s peak. Moreover, the degree of integration varies considerably across market segments. While the banking sector has become more integrated on the back of advances in banking union (Figure 1a), equities remain the least integrated market (Figure 1b), emphasising the need for a fully-fledged CMU.[1]

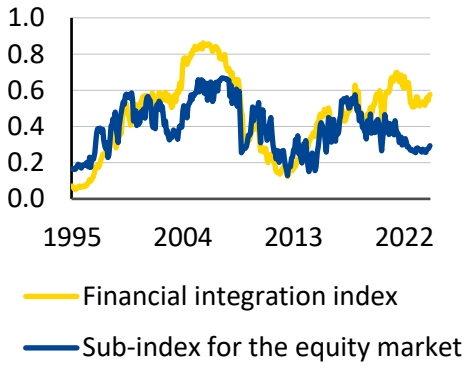
Figure 1
Financial integration index and select sub-indices

(a) banking market
(index from 0 (low) to 1 (high))



Source: European Central Bank

(b) equity market
(index from 0 (low) to 1 (high))



Source: European Central Bank

Against this backdrop, the case for further development and integration of EU capital markets remains strong and has implications for the ESM mandate. The need for advancing the CMU agenda is linked to reducing vulnerabilities related to Europe's bank-centric financial systems and leveraging complementarities between banks and capital markets.[2] By increasing the share of market-based financing for firms and households, a greater diversification of funding sources can be achieved, in line with European policymakers' vision of CMU as a bulwark of macrofinancial stability — the core element of the ESM mandate.

[1] See the European Central Bank's *Indicators of financial integration and structure in the euro area*.

[2] Langfield and Pagano (2016) point to the higher systemic risk of bank-based systems due to the inherent leverage, while Levine (2002) assesses the advantages of bank- and market-based systems, finding that each comes with a distinct set of advantages and drawbacks, thereby making a case for the mixture of both as a catalyst for sustainable economic growth.

Several recent high-profile reports — produced by Enrico Letta[3], Christian Noyer[4], and Mario Draghi[5] — have imparted renewed momentum to CMU policy discussion.[6] The Letta report emphasises that the completion of CMU is a joint effort by all EU Member States and advocates for a European Code of Business Law as a springboard to foster cross-border investments. Draghi's assessment strikes a similar chord, identifying the heterogeneity of tax and insolvency schemes as key impediments to the completion of CMU. The Noyer report aligns with these views and emphasises the need for a pan-European long-term savings product to channel savings towards European capital markets. It is within this policy framework that this paper fits, with a focus on identifying measures to unleash the flow of retail capital while preserving financial stability.

A stronger CMU will help Europe face the mounting challenges of the demographic and the twin green and digital transitions, geoeconomic fragmentation, and the pressing need to finance substantial investments to bolster EU competitiveness. Ageing will have profound implications for financial stability as it affects growth, savings, and future interest rates. Similarly, mitigating climate change and taking full advantage of new technologies will also require additional public and private funding. Estimates of the additional spending needs for European countries until 2050 due to these pressures range from 3% to 10% of gross domestic product (GDP), depending on the country.[7] These hefty needs affect a range of sectors. At the lower end of costs, Draghi estimates that up to an additional €800 billion a year may be required until 2030 to master the energy transition and remain competitive in digital technologies, as well as in defence.[8] Noyer raises the price tag to €1,000 billion a year over the same timeframe on a similar set of investment needs. Whatever the case, the size and scope of these needs suggest that Europe's bank-centric financing model will not suffice to provide the necessary capital. Instead, larger volumes of direct financing (both equity and bonds) will be paramount to achieve the needed investment volumes and associated productivity gains. This shift in focus towards meeting Europe's investment needs, notably by changing saving habits, explains why CMU has found renewed impetus and a new name – savings and investments union.

Deepening the integration of European capital markets via CMU will enhance the resilience of the European economy. Because of its high dependence on trade, the European economy is highly vulnerable to geoeconomic fragmentation. Completing CMU as part of a broader agenda to deepen the single market is therefore key to enhancing Europe's strategic autonomy by facilitating effective resource allocation, thus enabling effective risk-sharing across countries and stimulating technological change.[9]

Important policy milestones have been reached on the path towards CMU. Accomplishments include the convergence of regulatory frameworks, more standardisation of practices, and

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[3] Enrico Letta - *Much more than a market* (April 2024)

[4] *Developing European capital markets to finance the future* | Direction Générale du Trésor

[5] *EU competitiveness: Looking ahead* - European Commission

[6] Besides these flagship reports, other important contributions include the European Commission's High Level Forum on capital markets union, the Statement of the Eurogroup in inclusive format on the future of Capital Markets Union, the Eurogroup's roadmap on the future of CMU, the European Council's conclusions on creating fully integrated European capital markets through CMU, the European Commission's Communication on the savings and investments union, the Statement by the European Central Bank's Governing Council on advancing the Capital Markets Union and the European Central Bank's Occasional Paper on capital markets union.

[7] See presentation by Rolf Strauch, 'Demographics and Financial Stability' (Sept. 2024).

[8] The European Commission and European Central Bank have similarly tried to estimate the required investments, coming up with €750 billion and €771 billion, per year until 2030, respectively.

[9] See Geopolitical shocks and geoeconomic fragmentation - presentation by Rolf Strauch | European Stability Mechanism

greater investor protection.[10] There have also been important efforts to develop specific markets (e.g. securitisation) to attract markets to the EU (for example, by encouraging derivatives trading from the United Kingdom (UK)), or to harmonise legal frameworks (on, say, passporting or anti-money laundering regulations).[11] More recently, there has been increased attention on giving retail investors and small entrepreneurs more access to capital markets (the EU's Financial Services Committee has taken stock on a number of Member State initiatives to this end).[12] Particular interest focuses on the potential benefits of pension system reform in developing capital markets and making them more stable.

Box 1: A brief historical excursus on CMU

The CMU initiative was launched by the European Commission in 2015 with an ambitious action plan and a follow-up plan enacted following a 2017 mid-term review, which have been largely delivered on. However, slower-than-desired progress in the integration of European capital markets led to a new action plan in 2020 to relaunch the initiative.

This new package contained 16 policy measures designed to deliver on three key objectives: (i) support a green, digital, inclusive and resilient economic recovery by making financing more accessible to European companies; (ii) make the EU even safer for individuals to save and invest long-term; and (iii) integrate national capital markets into a genuine single market.[13]

A set of four legislative proposals was put forward in November 2021. Many of these reforms are now being implemented: the European Single Access Point, which will make it easier to find public financial and sustainability information on EU companies and investment products; the enhancement of certain frameworks like the European long-term investment fund; the strengthening of the Alternative Investment Fund Managers Directive; and the review of the Markets in Financial Instruments Regulation.

A second set of proposals made in December 2022 comprised an EU Listing Act, a new initiative on corporate insolvency, and strengthening EU clearing under the European Markets Infrastructure Regulation. Such efforts were followed in May 2023 by a proposal for a retail investment package. New rules were also proposed by the European Commission in June 2023 to make withholding tax procedures in the EU more efficient and secure (known as the FASTER initiative).

Despite these significant efforts, the integration of capital markets in Europe is still far from the desired level for a monetary union. By some metrics, in fact, financial integration has even retreated since 2022, prompting policymakers to redouble efforts to revive the CMU project.[14]

Amidst a rich and multi-faceted debate, we set out to contribute to three areas relevant to the ESM's mandate to safeguard financial stability:

(i) We argue that well-designed incentive schemes and pension system reforms could expand the range of financial vehicles available to European households, particularly

[10] For a complete list of legislative measures to complete the CMU please see here.

[11] See '*Legislative measures taken so far to build a CMU*' for a list of similar measures from the CMU package that have been achieved thus far.

[12] See Financial Services Committee (2024) here: Financial Services Committee contribution to the follow-up work to the Eurogroup statement on the future of the CMU.

[13] The 2020 action plan can be found here.

[14] See European Central Bank's *Financial Integration and Structure in the Euro Area* Report (2024) for a deep quantitative and qualitative analysis on the topic.

equity and equity-like instruments given Europe's bank-dominated financial structure. We argue in the following chapters that tax incentives could redirect a substantial amount of European households' bank deposits towards capital markets (see Chapter 2), while pension system reform could unleash further household savings matched to long-term investment needs (see Chapter 3). In doing so, these measures would also buttress financial stability by broadening the investor base for issuance on primary markets and increasing liquidity in secondary markets.

(ii) Measures to boost cross-border retail investment flows across Europe would also bring stability by reducing financial fragmentation.[15] The paper identifies the degree of home bias in retail investments and discusses ways to reduce it.

(iii) We also argue that securitisation could increase bank lending capacity to non-financial corporations while widening access to corporate credit markets by attracting a broader investor base. Additionally, we explore how a pan-European securitisation platform, supported by public guarantee, could undergird this loan market. As we have argued before, a more vibrant and well-regulated securitisations market in Europe would enhance financial stability.[16]

We have chosen to cover limited and selective topics. We have left out important elements of the — very large — CMU agenda such as the optimal design and mandate of the European Supervisory Authorities, the harmonisation of insolvency regimes, and the regulation of derivatives markets. This is not to say that these issues are not urgent or relevant.

This focus has allowed us to develop more comprehensive contributions on the topics of broadening retail participation, in part through more funded retirement savings, and increasing cross-border investment activity. This choice stems from our belief that broadening retail participation — coupled with stronger financial literacy — would not only improve access to direct financing for firms but would also increase market depth and thus help make European financial markets more stable and resilient to shocks. Similarly, increasing the share of funded pensions across EU Member States would not only unleash more long-term capital for investments but would also make national pension systems more sustainable and resilient to the effect of the ageing population. Increasing the share of cross-border investments would both improve resource allocation and lower the risk in households' portfolios through diversification. Financial stability and fiscal sustainability are at the core of the ESM's mandate and our choice reflects the institution's priorities, guiding our contribution to the broader CMU debate.

These topics, and the related policy recommendations, also fit within the priorities of the Eurogroup. These include strengthening the architecture of the financial system, ensuring better access to finance for businesses, creating better opportunities for EU citizens to accumulate wealth safely, and increasing retail participation.[17]

The thread of our analysis proceeds as follows:

1. In the Chapter 1 we assess the profile of European retail investors to determine whether they are fit to provide the bulk of funding needed for CMU. We determine that while European retail investors are wealthy and thrifty, they tend to be risk-averse, exhibit a

[15] See Hudecz *et al.* (2024) "Geoeconomic fragmentation: Implications for the euro area and ASEAN+3 regions" ESM Discussion Paper 23

[16] See ESM Blog "Reviving securitisation in Europe for CMU"

[17] For details on the Eurogroup's priorities see "Statement of the Eurogroup in inclusive format on the future of Capital Markets Union"

strong home bias, and that their wealth is unevenly distributed.

2. Based on those findings, we argue in the Chapter 2 that there is a need for European authorities to consider tax incentives to generate retail capital and, possibly, more equitable access to capital markets. To build our case, we highlight successful aspects from several cases at the national level.
3. As successful investments in capital markets often require a long-term perspective, we then explore in Chapter 3 the role that retirement savings could play in increasing the supply of retail capital, highlighting jurisdictions where pension system reform has helped to develop their domestic capital markets.
4. A strong home bias in retail investments prevents the efficient allocation of capital across Europe. Hence, in Chapter 4 we assess the degree to which retail capital is invested across borders, discuss several barriers to cross-border investments, and propose measures to lower them.
5. Finally, recognising that CMU goes hand in hand with banking union, in Chapter 5 we ask how banks could deploy some of their large retail deposits to foster CMU. We argue that securitisation is a natural vehicle for linking banks to capital markets through bank issuance of securities to finance companies.

1. Are European retail investors fit for CMU?

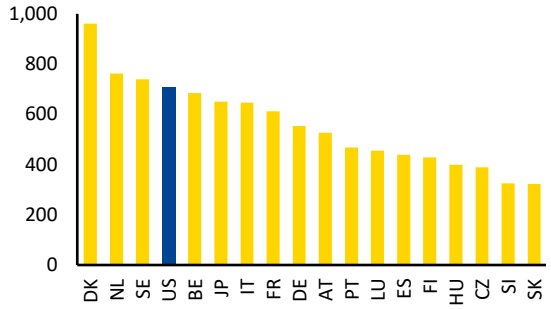
In this chapter we review the savings profile of European households to identify characteristics that may be impeding the development of CMU.

European households are wealthy and thrifty…

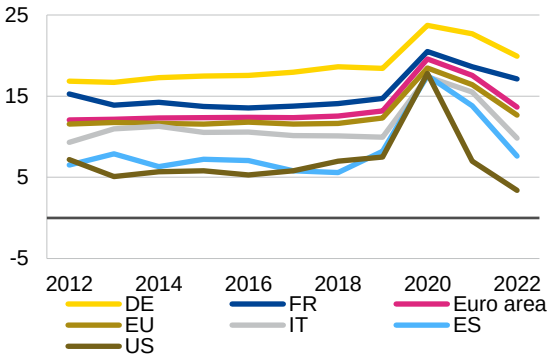
Most European countries have substantial pools of savings available for investments, as shown by a relatively high ratio of household financial wealth to disposable income (Figure 2). Despite notable variation across countries, in most EU Member States household wealth is more than four times the annual disposable income. And in some countries (Denmark, the Netherlands, and Sweden) average wealth actually surpasses that of the United States (US). European saving rates are also relatively high as a proportion of income — especially when compared to the US.[18]

Figure 2

Household net financial worth
(in % of disposable income)



Gross household savings rate
(in % of disposable income 2012–2022)



Note: Households' net wealth includes (i) deposits, (ii) insurance and private pension products, (iii) loans granted by the household sector, (iv) shares, (v) other accounts receivable, and (vi) gold.
Sources: Organisation for Economic Co-operation and Development (OECD), Q4 2021; and Eurostat

…but financially conservative.

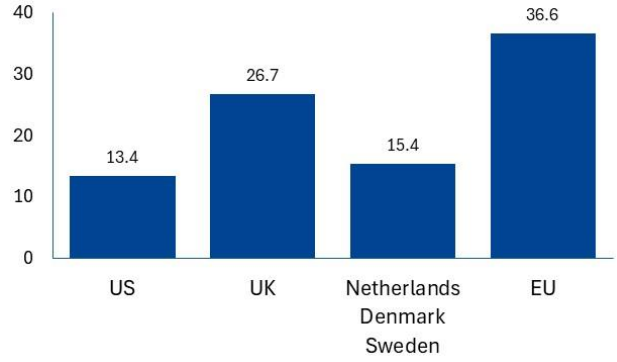
European households are risk averse, allocating nearly two fifths of savings to low yielding assets (Figures 3 and 4).[19] In most EU jurisdictions, households allocate a greater share of financial wealth to bank deposits and cash than in the UK or the US. It is thus unsurprising that the role of equity markets in economic activity is stunted in most EU economies compared to the US. (Figure 3). As noted in the European Commission's 2025 communication on a savings and investments union, "the coincidence of relatively low productivity growth and relatively high savings rates points to problems in the intermediation of those savings to productive investments". In other words, the high allocation of savings to deposits is likely to be hampering productive investments in Europe.

[18] Households' gross savings rate in the US trailed slightly above 5% in the pre-Covid-19 years. The rate stood at 3.4% in June 2024.

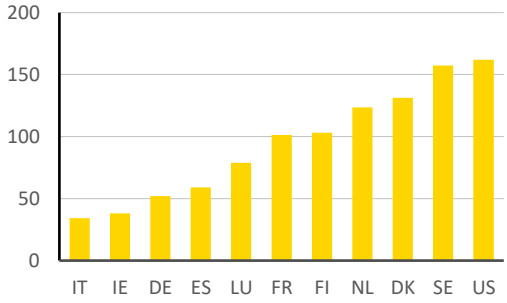
[19] The Noyer report found that 47% of European households' financial holdings are in guaranteed financial products, i.e. cash and deposits as well as life insurance products and annuities.

Figure 3

Household deposits and cash holdings
(in % of financial assets)



Stock market capitalisation
(in % of GDP, average 2014–2022)

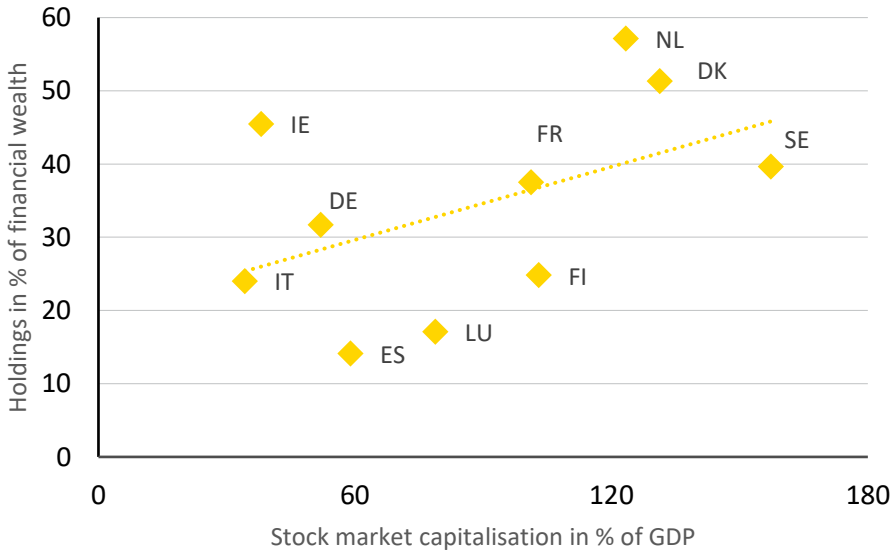


Note: For left-hand chaft, data for the EU and for the average of the Netherlands, Denmark and Sweden are for Q4 2023, for the US are Q4 2021, and for the UK are Q1 2021.
Sources: European system of national and regional accounts 2010 Statistics, Haver Analytics, World Bank, CEIC, and ESM Staff calculations

European countries with the largest stock market capitalisations relative to GDP are those where households are most vested in retirement and annuity plans as a proportion of their total financial wealth — namely Sweden, the Netherlands, and Denmark (Figure 4). This correlation suggests there is an important underlying link between a nation's pension system and the availability of equity capital in that jurisdiction. We explore this relationship further in Chapter 3.

Figure 4

2014–2022 average stock market capitalisation; Q4 2023 household holdings of pension, life insurance, and annuities

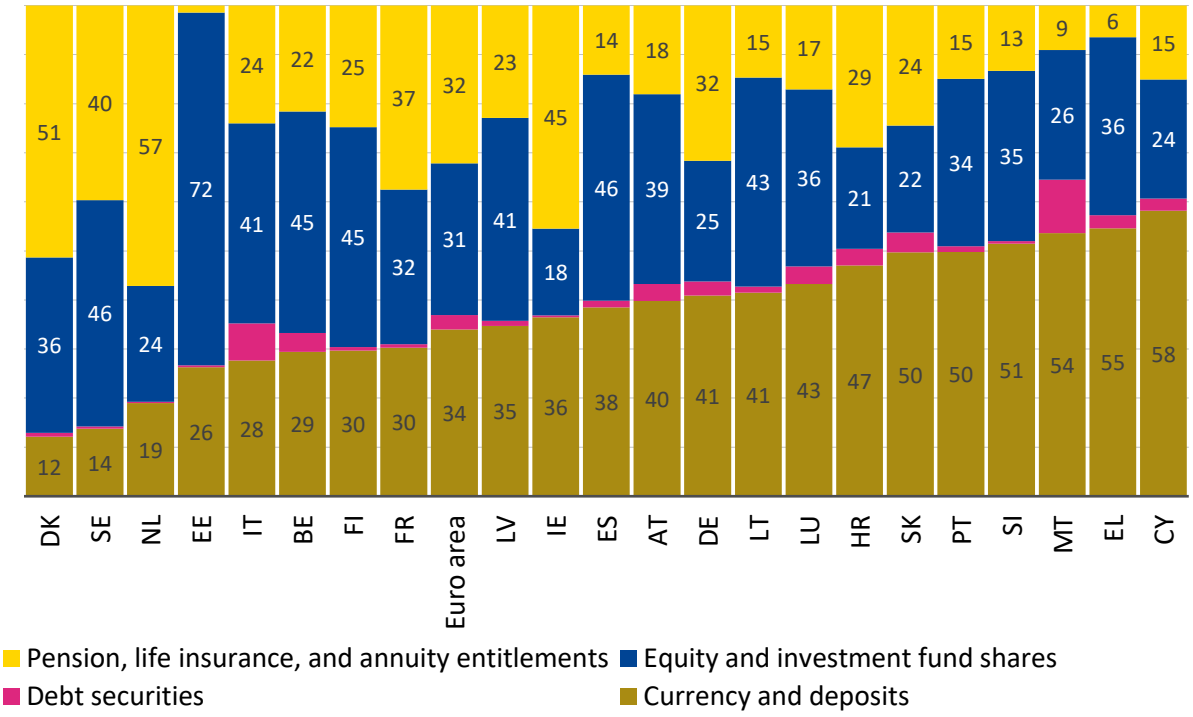


Sources: Organisation for Economic Co-operation and Development (OECD), World Bank and CEIC

Even without increasing household savings rates, European economies have room to reduce their reliance on bank-based financing and shift towards a greater role for capital markets. As shown in Figure 2, household saving rates in the EU are relatively high. On average, households saved over 12% of their disposable income between 2012–2020. Assuming that the flow of savings is allocated across different asset classes in the same proportions as the existing composition of financial wealth (Figure 3), 36.8% of these

savings are allocated to bank deposits.[20] If tax incentives could be designed to nudge the allocation to deposits down to the 15% average of the Netherlands, Denmark, and Sweden (Figure 5), roughly 2% of EU household disposable income could be made available for investment into capital markets.[21] Using data on disposable income from 2023, this would translate into roughly €250-€300 billion per year. Comparing this figure with Europe's additional €800 billion annual investment needs suggests that around one third could be met through appropriately designed tax incentives.[22]

Figure 5
Households' distribution of financial assets
(in %, Q4 2023)



Sources: European system of national and regional accounts 2010 Statistics and Haver Analytics

Wealth is unevenly distributed

Households' financial wealth is severely skewed towards the richest segments of the population. The richest 10% of the EU population holds around 70% to 85% of the wealth across a wide range of financial assets: investment funds, listed equities, debt securities, and life insurance annuities (Figure 6a). The next four deciles hold between 15% to 30% of this wealth, while the bottom half of the population barely participates in financial

[20] The relatively high savings rate combined with the high allocation of savings to bank deposits makes it reasonable to assume a general risk-aversion of European households. Following Niemann (2004), the combination of timing and investors' risk appetite can delay or slow down investments.

[21] While an ambitious target, this assumption may also be compared to the corresponding figure for the US, where households allocate 13.4% of their savings to deposits.

[22] We do not assume that the introduction of tax-preferential savings vehicles will lead to any increase in the overall household savings rate. Studies on the incentives provided by US pension plans like IRAs and 401(k) have delivered conflicting evidence in this respect. There appears to be broad consensus that tax deferred savings accounts have induced portfolio shifts towards tax-favoured assets, but less consensus on whether they have increased the household savings rate, cf. Poterba, Venti and Wise (1996), Engen, Gale and Scholz (1996), Bernheim (2000) and Besley and Meghir (2000).

markets.[23] This inequality becomes more acute when translated into population figures. CMU aspires to benefit the 350 million residents of the euro area. Yet, because of this skewed wealth distribution, only about 35 million people are likely to meaningfully benefit from this project directly unless specific policy measures are taken.

In countries that have done more to develop private pensions systems — notably, the Netherlands, Denmark, and Sweden—**personal wealth is distributed slightly more equitably** (Figure 6b). While use of financial markets by the poorer half of the population is also very low in these countries, the share of wealth held by the richest 10% in Denmark and the Netherlands is about 10 percentage points lower than the EU average for this group, meaning that a larger share of financial wealth is held by the middle class.

Expanding CMU in absolute size and in social reach requires making non-bank financial investments more accessible to the middle and lower wealth deciles, and broadening financial literacy. Most of the European population is engaged with the banking system, as evidenced by the widespread ownership of bank deposits and housing wealth, the latter largely acquired through mortgage loans (Figure 6a). Yet, the very limited participation in financial markets of the nine least wealthy deciles makes it hard to promote CMU as a project that benefits a broad cross-section of the population. Improving financial literacy, especially among the less wealthy, is needed to increase participation in financial markets.[24]

Capital markets can complement banks, but action needed to nudge households

An over-reliance on banks may prevent economies from leveraging the complementary roles of banks on one side and capital markets on the other in terms of financial intermediation. In light of this, the challenges to a successful CMU are compounded by intense competition in European banking services. As a result, capital market products are often crowded out by more affordable banking services.[25] While such competition may appear healthy at first glance from a consumer perspective, an over-reliance on either segment, whether banks or capital markets, can constitute a financial stability risk due to a lack of diversification. For example, in a bank-centric economy, procyclical lending policies by banks can extend an economic downturn by further constraining access to financing during periods of economic contraction.[26] Against this background, the complementary nature of capital markets can be emphasised:[27] in hard times, they provide an alternative source of financing to facilitate the economic recovery; in good times, they compete with banks to allocate capital more efficiently. In this sense, CMU can be seen as a stepping-stone to a more diversified and resilient financial system, which

[23] Studies have found a link between financial illiteracy and low participation in financial markets (e.g. Bucher-Koenen and Ziegelmeyer, 2014). These authors find that the financially illiterate are more likely to sell assets during market downswings, thus forgoing the recovery phase and rendering the underperformance of their investments permanent. Better financial education would help households develop long-term portfolio strategies that are more stable.

[24] Bucher-Koenen and Ziegelmeyer (2014) show that households with low financial literacy are more prone to permanent withdrawals from capital markets when their investments suffer losses.

[25] See work of Angeloni et al. (2024) argue that overbanking prevents a diversification of funding sources towards the capital market. A similar point is made by Pagano et al. (2014), who encourage the issuance of mini-bonds for SMEs as a remedy for this overbanking, and thereby already point in the direction of a capital market solution.

[26] See Becker and Ivashina (2014, 2018) show that bank lending to firms tends to be more procyclical compared to credit supply from investors in capital markets.

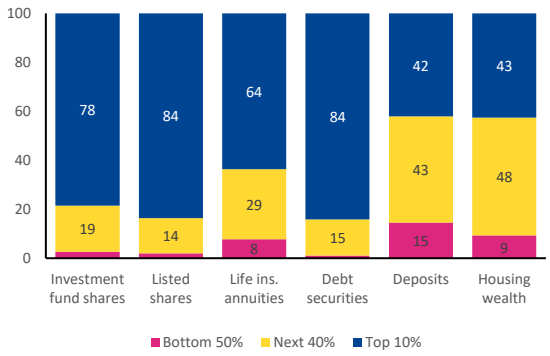
[27] See work of Bossone and Lee (2004) show that banks can become more efficient when they operate in markets with competitive capital markets, while Drucker and Puri (2007) find that capital markets also gain from more competitive banks, as underwriting fees and spreads contract.

leverages the distinct strengths of banks and capital markets alike.

Figure 6

(a) Households' wealth distribution of selected assets

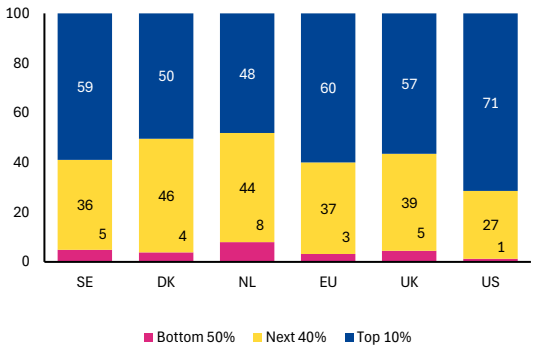
(Q1 2024 euro area average, in % by decile)



Sources: European Central Bank Distributional Wealth Accounts and ESM staff calculations

(b) Net personal wealth distribution

(2009–2022 average, in % by decile)



Sources: World Inequality Database and ESM staff calculations

In conclusion, European households seem fit to engage in a more complete and vibrant CMU, but significant policy measures are needed to shift household behaviour.[28] They hold substantial amounts of wealth distributed across a wide range of assets. However, their asset allocation is rather conservative and biased in favour of the wealthier segments of the population. There is also considerable heterogeneity in capital market participation across EU Member States. There seems to be a pattern of countries with broader retail participation in capital markets and a higher share of funded pensions having somewhat less skewed wealth distribution and more developed capital markets. In Chapters 2 and 3, we turn our attention to i) policy measures that could enhance retail participation in financial markets, and hence the relevance of CMU, to a broader span of income segments; and ii) how pension system reform could make more long-term capital available to meet Europe's financing needs.

[28] This is in line with the European Commission's communication on a savings and investments union, which emphasises that significant changes in the financial system at both EU and national level are required to reap the benefits of such integration.

2. Assessing incentive schemes to broaden retail participation in capital markets

As evidenced in the previous chapter, retail participation in European capital markets is limited and skewed to higher wealth segments, constraining the supply of capital for investments needed to foster EU productivity and growth. In this chapter, we argue that a concerted effort is needed to explore the potential of incentive schemes to broaden retail participation in capital markets, with a focus on tax incentives.

A range of approaches across Europe

There is significant heterogeneity in the tax treatment of capital gains across Member States (see Figure 7), even across those with highly developed capital markets. However, the Noyer and Letta reports both highlight the role that tax-preferential savings products could play in attracting private savings into investments that align with EU strategic goals, drawing on the experience of some national schemes (namely, Italy, France, and Sweden).

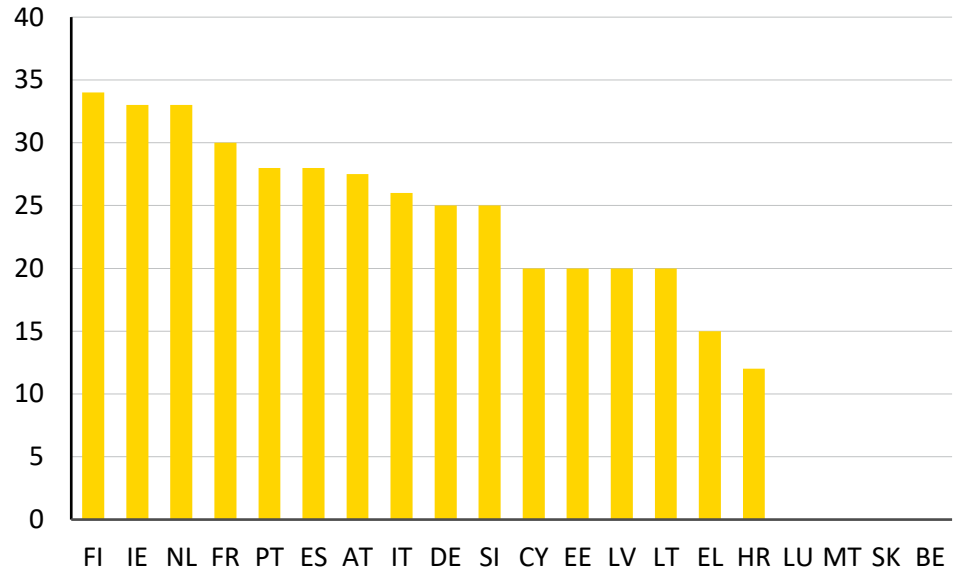
Investment savings accounts with preferential tax treatment have, in fact, proven successful in encouraging households to take a longer-term perspective in allocating their savings. As such, these examples feature prominently in the CMU policy discussion. A recent Financial Services Committee survey of national initiatives to deepen capital markets has generated mixed evidence: While tax incentives do not generally increase the equity holdings of institutional investors, they can boost the capital market participation rate of retail investors, when part of a national incentive schemes. The European Commission's communication on a savings and investments union accordingly includes a plan to introduce a European blueprint for savings and investment accounts by Q3 2025.

We examine data on participation rates to identify which schemes have been most successful and find tentative evidence that tax incentives, if properly calibrated, can be a powerful instrument to broaden household participation in capital markets across income segments. The Swedish *Investeringssparkonto* (investment savings account, ISK) stands out with a particularly high penetration rate, and we provide a more detailed case study on its underlying success factors. At the same time, having more retail clients investing in capital markets requires strengthened efforts to enhance financial literacy, both to incentivise participation and to address financial stability risks. Budget implications of such incentive schemes also have to be taken into account, especially if sustainability risks are imminent.

Figure 7

Tax rates on capital gains from securities holdings

(in %)



Notes: In Belgium, capital gains are tax exempt if they form part of the "normal" management of privately held assets. In France, high-income earners pay a higher tax rate (34%). In Germany, an additional charge is applied for members of certain religious confessions. In Slovenia, capital gains are tax exempt if the holding period exceeds one year. In Slovakia, capital gains from the sale of shares traded on an EU market are tax exempt, subject to a minimum one year holding period. In Malta, capital gains are added to individual income, and subject to the corresponding tax rate (tax exempt up to €9,100). In Luxembourg, capital gains derived from the sale of shares of less than 10% of a company's share capital are tax exempt, subject to a minimum six month holding period.
Sources: Tax foundation and PricewaterhouseCoopers

Tax incentives can promote retail capital investment

Savings and investment accounts with preferential tax treatments can incentivise investment in equity and other financial assets. In France, capital gains on investments in a *Plan d'Épargne en Actions* (share savings plan, PEA) are tax exempt after a minimum holding period of five years, on the condition that at least 75% of their assets are invested in Europe. Italy offers similar schemes, *Piani Individuali di Risparmio* (individual savings plans, PIR), although the rules on asset allocation are even stricter: at least 70% of PIR assets must be allocated to financial securities issued by European companies with a permanent establishment in Italy. In this context, the Swedish ISK provides a counterexample of a vehicle with no restrictions on asset allocation or holding period, arguably broadening its appeal (see Box 2 for a detailed account).

In terms of the tax incentive offered, the examples studied show a range of ways to treat capital gains, each with different budgetary implications for the state (Table 1). Capital gains in the French and Italian schemes are fully tax exempt, but there are limits on contributions to limit the loss of tax revenue. At the other end of the spectrum, the Danish and Norwegian investment savings accounts are subject to the same ordinary capital gains tax as other investments. Their main incentive stems from simplifying the administration of tax returns.[29] This is achieved by taxing the accrued return of the account rather than the realised capital gains, eliminating the administrative burden of filing tax returns for capital gains on individual transactions. However, the limited success

[29] See, among others, Institute for Fiscal Studies (2011) and Devereux (2016) on the benefits of a simple tax structure as a means of reducing tax uncertainty and subsequently audit and compliance costs, thereby ensuring an efficient tax collection.

of the Danish and Norwegian examples regarding the number of active accounts and total savings in these accounts suggests that some tax incentives are needed to entice broad participation.[30]The Swedish ISK provides a conceptual benchmark to assess the trade-off between providing sufficient tax incentives and containing fiscal costs. Capital gains are taxed based on an imputed return, corresponding to the risk-free rate plus a one percentage point premium irrespective of actual capital gains accrued. Similar to the Norwegian and Danish schemes, this eliminates the administrative burden of filing tax returns for individual transactions. However, since this notional return is higher than the return on safe investments, it also provides an incentive to invest in assets with a higher expected return. The high penetration rate of the ISK suggests that the tax treatment, combined with the simplicity of filing tax returns, provides a powerful incentive for households to invest in capital markets.

Table 1
Comparison of selected European investment savings accounts

	PEA (France)	PIR (Italy)	ISK (Sweden)
Restrictions on asset allocation	Minimum 75 % in European companies	Min. 70 % in European companies with a permanent establishment in Italy	No restrictions
Tax treatment	Five year holding period for tax exemption	Five year holding period for tax exemption	Capital gains tax applied to an imputed return (risk-free rate plus one percentage point)
Minimum holding period	Five years	Five years	No restrictions
Aggregate balance	€101 billion as per 2022	€19 billion as per 2023	€150 billion as per 2023 (SEK 1,665 billion)
Share of GDP	3.5%	0.8%	27%

Note: Danish and Norwegian investment savings accounts are not included due to lack of comparable data on penetration.
Sources: Bank of France, Italian association of asset management companies Assogestioni, Swedish Tax Agency, and European Central Bank

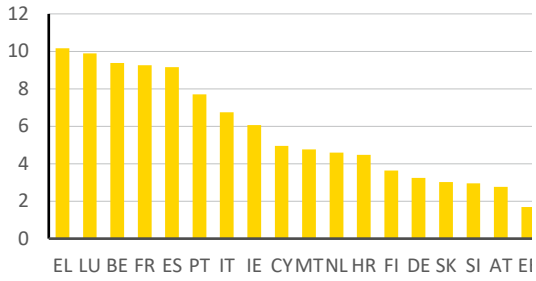
Assessing the costs of fiscal incentives

The budgetary implications of tax incentives need to be carefully assessed, especially for countries with limited fiscal space. Making capital gains fully tax exempt may cause significant loss of revenue for some Member States (Figure 8a), especially if there are no restrictions on contributions. Setting such restrictions too low, however, will limit the amount of capital unlocked to finance needed investments. In this context, it is interesting to note that fiscal revenue from capital gains tax in Sweden did not fall significantly after the introduction of the ISK (Figure 8b). In fact, the average contribution of capital gains tax to total tax revenue was higher in the decade following its introduction, compared to the preceding period for which data is available. This is due to a combination of factors. Many households which already invested in stocks moved savings to an ISK and pay lower capital gains tax as a result. Others, who were not actively investing in stocks before, have been induced to move savings from deposit accounts to an ISK. Households that move money from a savings account pay a higher capital gains tax than before, given that the imputed return is higher than the deposit rate. The incentive to take more investment risk

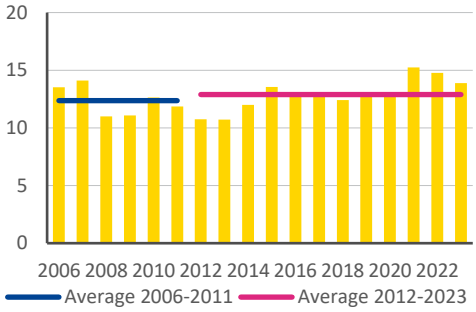
[30] The number of Danes with an active Share Savings Account is roughly 350,000, about 6% of the total population, while about half the adult population in Sweden have an ISK. The total savings balance in the Norwegian Share Savings account is approximately €26.4 billion, just under 5% of GDP, compared to 27% of GDP for the Swedish ISK.

also make their savings balance grow at a higher expected rate, increasing the tax base over time and offsetting the erosion caused by existing retail investors switching capital into an ISK. Finally, the ISK reduces incentives for tax planning by front-loading the tax payment at a preferential rate.

Figure 8
Capital gains tax share of total tax revenue
a) 2012–2022 average contribution by euro area member state
(in %)



b) 2006–2023 contributions in Sweden
(in %)



Sources: Eurostat, Statistics Sweden

Among the numerous design choices available, simplicity and flexible investment options appear key to ensuring broad retail participation. Comparing the French, Italian, and Swedish experiences suggests that imposing restrictions on contributions, asset allocation, or holding periods makes such an account less appealing to a broader investor base (Table 1). While the Noyer report suggests setting a minimum limit on investments in Europe, we believe caution should be exercised with such restrictions as they go against standard portfolio theory. To maximise the return and protect their investments from the impact of asymmetric shocks, households that move their savings to a tax-preferential investment account should be allowed to invest globally and in a diversified manner. Given the economic importance of the EU and the prevalence of a home bias in investments, large sums will nevertheless be allocated to meet Europe's investment needs.[31]

At the same time, tax incentives cannot be too generous, if there are no restrictions on contributions. Taxing the balance of investment accounts by applying an imputed return above the typical rate on deposits, but below the expected return on stocks, has several benefits. First, as noted, it simplifies the administration of tax returns by eliminating the need to file returns for capital gains on individual transactions. Second, it provides incentives to take more investment risk, without overly eroding the tax base for capital gains tax. Restrictions on the usage of proceeds should be light, if any. A minimum holding period does not appear to be desirable either, as there is evidence that such lockup periods lead to subpar investment outcomes due to the illiquidity and re-allocation constraints they impose.[32]

[31] This is also in line with recommendations by the Franco-German Council of Economic Experts in their joint statement on enhancing EU capital markets

[32] Cf. Meade (1990) on how lock-in effects depress risky investments, and Dai *et al.* (2008) on how lock-in effects can impair stock market liquidity.

Spreading the benefits throughout society

In order to address the inequality in financial wealth distribution (Figure 4), tax incentives could be geared more to households in the bottom half of the income and wealth distributions. One way to achieve this could be through a progressive capital gains tax,[33] whereby account balances below a certain threshold are subjected to a lower imputed return or rate of taxation, or made fully tax exempt, depending on the fiscal space available.[34] Another option may be to link the magnitude of the tax incentive to income deciles. An example in this regard would be the recently launched German legislation to match citizens' investments into equity instruments, whereby the state contribution is greater for those with taxable income below a certain threshold.

Higher retail participation in capital markets would enhance financial stability by increasing the number of risk-takers. A broader and more diversified investor base would increase market depth and liquidity, as well as reduce firms' dependence on banks and large investors. This could enhance the resilience of financial markets in the euro area to sudden shifts in risk appetite among banks and large institutional investors, ensuring more stable financing sources for firms. Broadly speaking, financial stability also stands to improve the more that risks are moved out of the banking sector and into non-bank financing vehicles, with lower leverage and less maturity transformation.

Nevertheless, recent experience has revealed that the growing role of non-bank financial institutions may give rise to other types of systemic risk, notably linked to fluctuations in system-wide demand for liquidity (e.g. the market turmoil during the March 2020 "dash for cash" and the UK gilt market crisis of September 2022). In addition, the non-bank sector is significantly less regulated and as a result the exposures are less transparent while rules and supervisory practices suffer from a lack of harmonisation, as highlighted in several recent reports.[35]

Initiatives that lead to further growth in non-bank financial intermediation could lead to an increase in related systemic risks, potentially necessitating changes to the macroprudential framework for non-bank financial institutions.[36] The Financial Stability Board, the International Organization of Securities Commission, and the International Association of Insurance Supervisors are working on developing macroprudential analyses and tools that aim to mitigate systemic risks related to non-bank financial institutions, and in May 2024 the European Commission launched a targeted consultation assessing the adequacy of macroprudential policies for non-bank financial intermediation. Continued work in this area and follow-up actions on the findings of the consultation should be pursued as a priority to balance integration and financial stability objectives.

Efforts to raise retail participation in financial markets need to be accompanied by larger investments in financial literacy education. If many households are exposed to fraudulent investment advice, it could cause a backlash and lead to households withdrawing from markets.[37] In a recent Eurobarometer survey, only in Finland and the

[33] See Diamond and Saez (2011) for a discussion of models for progressive capital gains taxation.

[34] To ensure that the rules are not exploited through households opening several accounts, the number of brokerage accounts could be restricted to one per citizen.

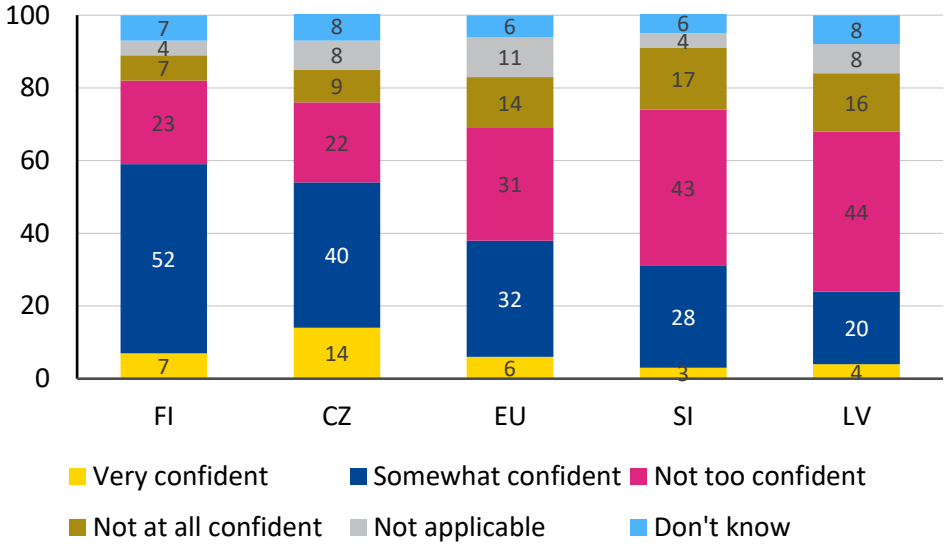
[35] Cf. Financial Stability Board: Enhancing the Resilience of Non-Bank Financial Intermediation: Progress report

[36] This could for instance involve extending central bank liquidity facilities to non-banks, in line with the recent initiative by the Bank of England Contingent NBFI Repo Facility (CNRF) – Explanatory Note 24 July 2024 | Bank of England, see also Collateral pledgeability and asset manager portfolio choices during redemption waves | European Stability Mechanism for a discussion on extending central bank liquidity to investment funds.

[37] Bucher-Koenen and Ziegelmeyer (2014).

Czech Republic did respondents express confidence in the financial advice they receive (Figure 9). At the European level, distrust is greater on average than trust in financial advice, with people in Slovenia and Latvia being the most sceptical.

Figure 9
Trust in investment advice from banks, insurers, and financial advisors
(in %, Q3 2023)



Source: Eurobarometer on monitoring the level of financial literacy in the EU, 2023

To lower the risk of any such backlash, national authorities could strengthen investor protection regulation and supervision as well as invest in financial education. Investing in capital markets requires a long-term perspective and understanding of the compounding effect of capital gains over a longer horizon. Surveys show that households in many EU Member States lack a sufficient understanding of these factors.[38]

Box 2: The Swedish investment savings account

In 2012, Sweden introduced a new savings vehicle, the ISK, aimed at facilitating the administration of tax returns for capital gains, as well as stimulating a higher share of household savings in equities and investment funds. The ISK is designed as a specific class of investment account that banks may offer to retail customers, drawing on the model of the Individual Savings Account introduced by the UK in 1999.

The ISK removes the need to file tax returns for individual transactions. Regardless of the actual level of realised or unrealised capital gains, the balance on the ISK account at the end of each quarter is instead taxed based on an imputed notional return, representing the sum of a risk-free rate plus a one percentage point risk margin. This notional return is then subjected to the standard Swedish tax rate for capital gains (30%). In practice, this means paying less capital gains tax than if investments were held outside the ISK, as long as the actual capital gains exceed the imputed return. As the converse is also true if the gains are lower than the notional rate, this creates an incentive to invest in assets with higher expected returns, like equities.

The ISK has been a highly successful product. Approximately half of the adult population

[38] Monitoring the level of financial literacy in the EU - July 2023 - - Eurobarometer survey.

owns an ISK, with total investments equal to more than 25% of GDP at end-2023. The incentive to invest in equities has contributed to creating significant household wealth since its inception. The high retail participation in the stock market also means that Swedish firms have access to broad pools of capital to finance initial public offerings (IPOs). Accordingly, the Swedish stock market is among the most dynamic in Europe, averaging 48 IPOs per year between 2021–2023 (outpacing, France, Spain, and Germany combined). The share of stock market capitalisation to GDP is furthermore the highest in the EU (Figure 4).

One of the main advantages of the ISK is that it simplifies the process of investing and of filing associated taxes. The pervasiveness and ease of digital transactions has also fostered its success. Competition in the Swedish financial services sector is also strong, which has improved the cost efficiency and ease of investing through ISKs, including through mobile app-based solutions.

However, the success probably also owes something to a longer history of retail participation in capital markets. Among several earlier tax-preferential investment schemes, Sweden launched its first such product in 1978. Over time, this has familiarised an increasing share of households with the idea of investing in stock markets and, arguably, led to a general increase in financial literacy. The prevalence of funded pension schemes has also played a part in this respect. As such, there may be synergies involved in pursuing the proposals for tax incentives included in this chapter in tandem with the proposals for pension system reform made in Chapter 3.

Policy considerations

Since taxation falls within the competence of national governments, the introduction or reform of tax-preferential savings vehicles will have to be decided by national authorities. This view is in line with the Financial Services Committee survey, which showed limited support for an EU legislative proposal requiring the introduction of an investments and saving account in all Member States with a minimum set of conditions for a pan-European label and the associated tax treatment. Member States believed it would be too complex for the European Commission to harmonise the area of capital gains tax and favoured an exchange of best practices instead. Accordingly, we primarily direct our considerations to national authorities, while acknowledging the important coordinating role that European authorities may take, for example, in sharing best practices among Member States.

Policy considerations for national authorities:

(i) **Setting up tax-preferential investment savings accounts to increase retail participation in capital markets.** Appropriate tax incentives could nudge households to allocate a higher share of savings to capital markets investments. Tax incentives need to be carefully calibrated in view of fiscal costs. An effective way to achieve this could be through savings and investment accounts with preferential tax treatment. Examples of such savings vehicles exist in France, Italy, and Sweden. Tax incentives could be designed so as to encourage households to take a longer-term perspective in allocating their savings, with a more significant equity component, by taxing the account balance based on an imputed return below the expected return on stocks. In addition to the tax incentives they provide, such accounts simplify the filing of tax returns. By providing higher expected returns over time, they also cater for the longer-term needs of an ageing population, while supporting EU long term-growth through broader access to

financing for firms. Experience suggests that restrictions on asset allocation or holding periods limit the appeal of the account. Caps on contributions may not be advisable either, given Europe's investment needs.

(ii) **Tax rewards could be geared towards the middle and lower income deciles.** These measures could be made relatively more generous for those in the lower deciles of the wealth/income distribution. For instance, Germany has recently launched legislation that will match citizens' savings into equity instruments up to €600 per year. The matching amount is greater for those with taxable annual income below a certain threshold.

(iii) **Education initiatives to improve financial literacy, enabling households to make better investment decisions.** Investing in capital markets requires a long-term perspective and an understanding of the compounding effect of capital gains over a longer horizon. Surveys show that many households lack sufficient understanding of these factors. Deepening financial literacy while broadening capital market participation could have a significant impact on social welfare in the longer term.

(iv) **Strengthen regulation and supervision in the area of investor protection, to reduce the risk of households being exposed to investment fraud.** If a large number of households are exposed to fraudulent investment advice, it could cause a public backlash and lead to households withdrawing from investing in capital markets.

Policy considerations for European authorities

(v) **Prioritise continued work on macroprudential policies for non-bank financial intermediation.** The European Commission launched a public consultation on macroprudential policies for non-bank financial intermediation in 2024. Continued work in this area and follow-up actions on the findings of the consultation should be pursued as a priority to balance integration and financial stability objectives.

3. Thoughts on reforming pensions schemes to nurture capital markets

Pension savings could play a major role in developing CMU and providing additional capital to meet Europe's investment needs. In this chapter, we look at how a shift toward occupational and personal pension plans might more effectively contribute.

How pensions savings could generate more retail capital for investments

Although banks dominate European financial systems, they will struggle to single-handedly finance Europe's investments needs and, hence, additional sources of long-term financing are needed. The estimated needs range between €4.9 trillion and €5.6 trillion until 2030. Banks have limited risk-taking capacity and typically have a bias towards lending secured by collateral.[39] To meet the investment needs identified in several recent high-level reports, European companies need wider access to long-term capital. Equity financing, in particular, is important for companies in the startup phase, but more bond market financing could also facilitate investments in research and development by mature companies.

Increasing the volume of funded retirement savings across Europe would enlarge the amount of capital available for long-term equity investments. In Europe, pension payments are largely paid for through current taxation of those still working — known as pay-as-you-go (PAYG) schemes. Any shift toward a higher share of funded pensions, financed by personal savings while working, could have substantial benefits for European capital markets. Investing in startup companies requires a long-term investment horizon and the ability to adhere to buy-and-hold investment strategies, something banks are less able to do. Moreover, pension funds differ from banks in having higher duration liabilities, granting fund managers longer horizons to consider early-stage equity investments.[40,41] The long-term nature of retirement savings has the necessary time-horizon for early-stage equity investments.[42] Funded retirement savings may also help to familiarise households with the idea of investing in capital markets and could, as such, support a general increase in financial literacy and a behavioural shift towards allocating more household savings to equities.[43]

A number of recent reports have stressed how supplementary funded pensions could play a role in enhancing European capital markets, while simultaneously strengthening the resilience of national pension systems.[44] Increasing the volume of funded retirement savings would also make Europe more equitable by reducing the share of European citizens that are vulnerable to poverty in old age as national PAYG plans do not suffice to maintain their standard of living. In the Final Report of the High-

[39] See Stiglitz and Weiss (1981) for the seminal paper on collateralised lending as a means to mitigate asymmetric information and adverse selection.

[40] Policyholders pay premia towards a pension plan or life insurance policy during their working lives, which is paid out when they reach retirement age. Moreover, there are typically restrictions on early withdrawals, meaning that the savings are locked in for a considerable amount of time.

[41] Note, however, that the extent of investment guarantees may constrain the scope for taking on investment risk.

[42] In this regard, European long-term investment funds are an additional vehicle through which to mobilise capital towards long-term investments. European long-term investment funds were introduced in 2015 as a new type of collective investment framework for companies and projects needing long-term capital. This market segment, however, is still in its infancy, with an estimated asset size of €11.3 billion at end-2022.

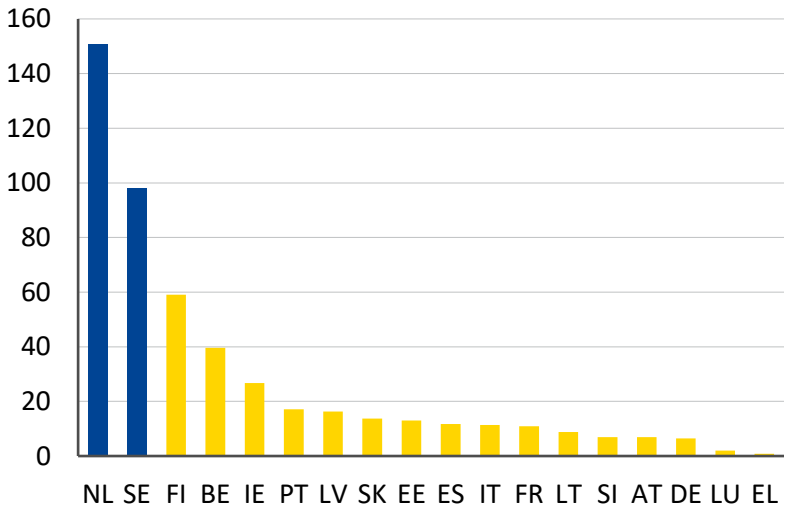
[43] The joint statement of the Franco-German Council of Economic Experts on enhancing the CMU makes a similar point on the role that funded pension may play in promoting a stronger equity culture: "*In the case of individually attributable shares in pension funds, the broad population would also be brought into contact with capital markets. This would potentially promote the equity culture as a whole"* (Franco-German Council of Economic Experts, 2024)

[44] Franco-German Council of Economic Experts, 2024; German Council of Economic Experts, 2023; Nöh et al., 2024

Level Forum on the Capital Markets Union, Wieser (2020) emphasises that pension inadequacy is a major problem in Europe, with almost one in five European citizens at risk of poverty and/or social exclusion as they get older.

Pension savings make up a large share of total household savings in several European countries (Figure 5). But the size of these savings varies considerably across EU Member States. The Netherlands and the Nordic countries stand out with sizeable retirement savings as a proportion of GDP, with most others lagging far behind (Figure 10). This means that the lion's share of funded retirement savings in Europe is concentrated in a handful of countries. The same group of countries also figures among those with the highest household net financial worth to disposable income (Figure 2), suggesting that funded retirement savings are a significant contributor to household wealth generation.

Figure 10
Assets earmarked for retirement
(in % of GDP)



Notes: Netherlands and Sweden are highlighted in blue because they stand out from peer EU Member States with a significantly higher ratio of retirement assets to GDP. A case study of the occupational pension sector in these countries is provided in Box 3.
Source: OECD, at end-2022 or latest available

With these considerations in mind, we now discuss key aspects of existing pension systems that could be reformed to incentivise long-term retail investments and increase the availability of long-term funding for companies.

The Northern way

The countries with the largest shares of pension savings to GDP are those that have gone furthest in reducing the pension entitlements provided by public PAYG schemes. In broad terms, these pension systems have a three-pillar structure (public, occupational, and personal).[45] By giving a larger role to the non-state pillars, these

[45] Pillar 1 is the public pension scheme. It typically operates on a PAYG basis, whereby contributions from the current working-age population fund pension benefits to current retirees. In terms of determining the pension benefit, a distinction is made between defined benefit, notional defined contribution, and flat rate and point systems. Pillar 2 includes the occupational pension schemes sponsored by employers. Pillar 3 includes private pension savings (some of which are tax-deductible).

countries have fostered the development of their capital markets.

Table 2
Main type of Pillar 1 pension scheme

Country	Type	Country	Type
Belgium	Defined benefit	Lithuania	Flat rate + Point system
Bulgaria	Defined benefit	Luxembourg	Defined benefit
Czech Republic	Flat rate + Defined benefit	Hungary	Defined benefit
Denmark	Flat rate + Defined benefit	Malta	Flat rate + Defined benefit
Germany	Point system	Netherlands	Defined benefit
Estonia	Flat rate + Point system	Austria	Defined benefit
Ireland	Flat rate + Defined benefit	Poland	Notional defined contribution
Greece	Flat rate + Defined benefit + NDC	Portugal	Defined benefit
Spain	Defined benefit	Romania	Point system
France	DB + Point system	Slovenia	Defined benefit
Croatia	Point system	Slovakia	Point system
Italy	Notional defined contribution	Finland	Defined benefit
Cyprus	Point system	Sweden	Notional defined contribution
Latvia	Notional defined contribution		

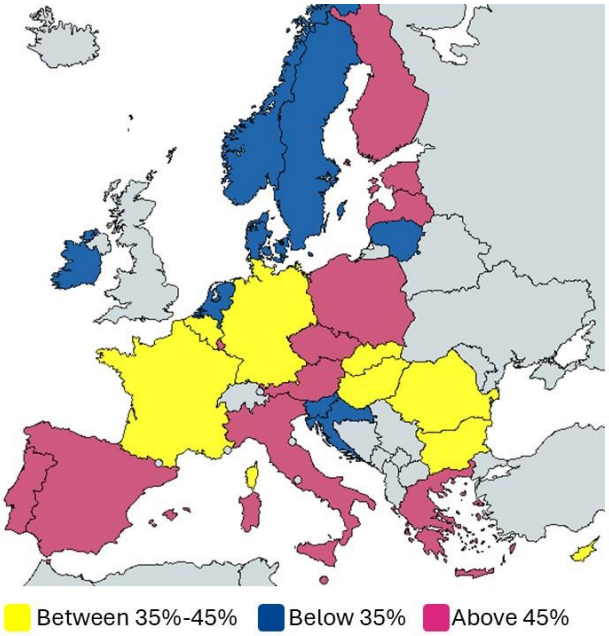
Note: Defined benefit, pension set as a proportion of past employment income; flat rate, same benefit for all pensioners regardless of past employment income; point system, pension calculated using varied criteria, such as years in employment; notional defined contribution, pension based on fees paid in during working life.
Sources: European Commission, Economic Policy Committee.

These reforms have also helped reduce the burden on the public pension system. PAYG schemes that offer defined benefits are typically more costly compared to flat-rate or capped notional defined contribution schemes. This is because the pension entitlement is calculated as a share of beneficiaries' past employment income (full or averaged over some period). Knowing that the state will provide a generous pension provides less incentive for households to invest in long-term retirement savings. Many EU Member States still offer defined benefits pension schemes (Table 2), and the replacement rate of publicly financed pension income to pre-retirement earnings remains relatively high in most countries (Figure 11), raising concerns about their long-term sustainability.[46] Efforts towards ensuring income adequacy in retirement would enhance financial stability by making public pensions more sustainable, while convergence among EU Member States towards lower replacement rates would foster the development of funded pensions and hence of CMU.[47]

[46] According to a comparative study by Heer, Polito, and Wickens (2023), most European countries have limited fiscal space to finance increasing ageing-related pension costs out of labour income taxation. This comes against the backdrop of a triple-squeeze on these systems, as described by Clements et al. (2014): Not only is life expectancy increasing, thereby requiring longer pension payments, but the base of contributors is being eroded by lower fertility rates as a particularly large cohort enters retirement. Oliveira Martins et al. (2005) theorise in this context that the simultaneous consumption of pension savings could lead to an "asset meltdown", whereby net demand for financial assets becomes negative, ultimately depressing asset prices, while pushing up interest rates. Fehr et al. (2003) argue that the opposite may become true, if younger cohorts increase their demand for financial assets for retirement planning, due to lower replacement rates.

[47] See presentation by Rolf Strauch, 'Demographics and Financial Stability' (September 2024).

Figure 11
Pension replacement rates of Pillar 1 schemes
(% of pre-retirement earnings)



Notes: The pension replacement rate is the net value of pensions in relation to previous net income from employment. The map shows the pension replacement rate of public PAYG schemes.
Sources: European Commission, Economic Policy Committee, and ESM Staff

In the Netherlands, Sweden, and Denmark, the state pension entitlement is capped at a level that incentivises individuals to invest in private pension savings and employers to offer occupational pension benefits to employees. While these systems share many characteristics, there are also differences in terms of how public pension benefits are determined, how occupational pensions are encourages, and how occupational pension fund assets are managed. The similarities and differences of the respective systems are explored in two case studies on Sweden and the Netherlands in Box 3.

Box 3 Occupational pension funds in two northern countries

Sweden

The Swedish pension system was fundamentally overhauled in 1994. The new system is based on a three-pillar structure, in which the public PAYG entitlement has been capped. Swedish citizens earn a notional defined contribution per year in employment, but the annual notional defined contribution is capped at a threshold income level.[48] Employers pay a fee corresponding to 16% of each employee's gross salary towards this scheme, which is used to finance pension payments for those currently in

[48] As of 2024, the cap corresponds to an annual income of SEK 614,500. The cap on contributions has been calibrated so as to yield a maximum state pension corresponding to roughly twice the level of a subsistence wage in Sweden, assuming a working life in full-time employment. The minimum allowance has been calibrated to half of the maximum level, or just above the subsistence wage.

retirement. In addition, 2.5% is paid towards a funded component of the first pillar (*premiepension*), which employees decide how to allocate.[49] If no active decision is taken, these *premiepension* contributions are allocated to AP 7, a state-run pension fund investing mostly in equities and alternative assets, designed to be cost-efficient and provide a high expected return.

Since the PAYG pension is capped, employers typically provide occupational pension plans as part of their benefits package, with defined contribution plans being the norm. As the Swedish labour market follows a collective bargaining process, these benefits are agreed between employer associations and labour unions in standardised employment contracts. Labour unions also run their own pension funds jointly with employer associations. For salaries up to a threshold corresponding to the income level at which the public PAYG scheme has been capped, the employer contributes around 5% to complement the public pension. For salaries above that threshold, the employer contributes a higher share, around 30%.[50] The employee can then choose how to allocate those funds from a pre-selected list of pension fund managers, with the default option typically the one managed by the relevant labour union.

Collective bargaining serves to standardise occupational pension benefits and drives the considerable scale of occupational pension funds in Sweden. Furthermore, for employees who have chosen the default pension fund, investments are normally managed collectively for all beneficiaries, following a traditional life product structure and an active portfolio management approach. The active management approach allows the portfolio manager more freedom, compared, say, to a passively managed equity fund that may only invest in large-cap stocks in an index. Notably, Swedish pension funds invest around 8% of total assets in unlisted equities (Figure 12). The active management feature thus allows Swedish occupational pension funds to provide considerable seed capital for early-stage SME investments.

More broadly, occupational pension funds have played a key role in supporting the development of the Swedish equity market and typically take a cornerstone position in IPOs, helping to increase the float, or the volume of shares trading freely. Early-stage financing from pension funds has been an enabling factor underlying the success of several Swedish tech unicorns, including Spotify and Klarna.

Compared to European peers, Swedish occupational pension funds invest a higher share in equities, on average around 45% of total assets (Figure 12), rising to 51% if equity investment funds are included. This is partly driven by path-dependence – as equities have outperformed other asset classes in the last decade, their share of total investments has increased.

Occupational pension schemes in Sweden also offer lower investment guarantees, compared to, for example, German peers. A key reason for this is a contractual innovation from the late 1980s, whereby the guaranteed return could be changed with each premium payment (referred to as serial premia policies). Prior to this, the guaranteed return was set in the initial policy, meaning that all future premium payments were guaranteed at the same rate. Pension policies underwritten when interest rates were high thus became very costly to hedge when interest rates fell, forcing the pension manager to invest more in safe assets. By contrast, pension

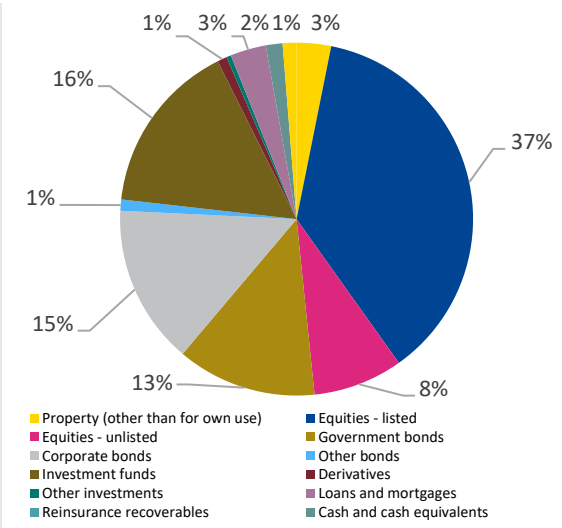
[49] A number of other countries have also switched part of their Pillar 1 scheme from PAYG principles into (quasi)-mandatory funded schemes, including Bulgaria, Estonia, Croatia, Latvia, Lithuania, Poland, Romania, and Slovakia.

[50] Since the PAYG pension entitlement is capped, occupational pension plans play a larger role for employees with higher salaries and employers have to contribute more to ensure a comparable ratio of post to pre-retirement income.

schemes with serial premia were able to lower the guaranteed return, allowing their fund managers to take more investment risk.

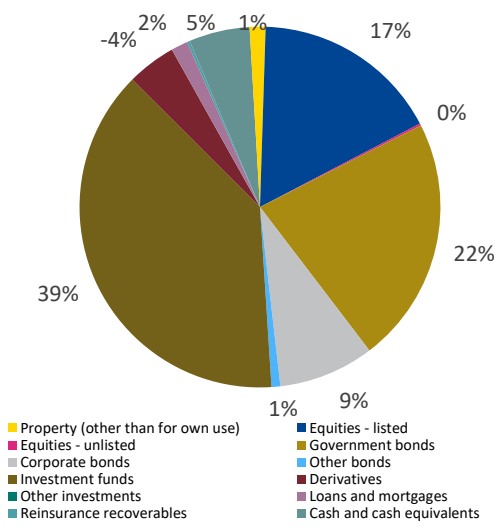
Figure 12
Asset allocation of occupational pension funds
(in % of total assets)

Sweden



Source: European Insurance and Occupational Pensions Authority, Q4 2022

Netherlands



Source: European Insurance and Occupational Pensions Authority, Q4 2022

The Netherlands

The Dutch system resembles its Swedish counterpart in many ways. The first pillar also features a basic PAYG pension, with a maximum payout equal to 70% of the minimum income for single people, and 50% for those in a couple. Dutch residents accrue a 2% entitlement towards the full pension for every year they live or work in the Netherlands. This is more generous compared to Sweden, where only workers accrue entitlements under the first pillar.[51] However, the flat rate has been calibrated to provide only a basic pension provision, at a level similar to the cap on the Swedish Pillar 1 entitlement.

Dutch employers also provide occupational pension plans. As in Sweden, these benefits are often set out in contracts negotiated through collective bargaining between employers and labour unions. There are pension funds for particular industries, professions and for individual companies and employers. Participation in an industry pension fund can be made mandatory for the entire sector by the Minister of Social Affairs and Employment, once a collective agreement between labour market participants in the corresponding sector has been reached. The mandatory aspect ensures that a large proportion of employees are covered by occupational pension schemes (around 90%).[52] Consequently, the net income replacement rate of the combined first and second pillars is around 90%, which compares favourably to the EU average of 68%. Compared to Sweden, a greater share of Dutch occupational pension plans have defined benefits entitlements, although reforms have recently been passed

[51] As a result, the Netherlands has one of the lowest rates of poverty in old age, 3% compared to the OECD average of 13% (OECD, 2018)

[52] Stichting van de Arbeid, 2022

to switch to defined contribution plans.

The relatively low flat rate at which the state PAYG scheme has been set, combined with the mandatory participation feature, means that occupational pensions also make up a larger part of Dutch retirement income compared to other European countries. Indeed, average occupational pension fund assets per capita in the Netherlands is around €300,000, almost five times higher than in Sweden and far above the average for the countries in the sample.

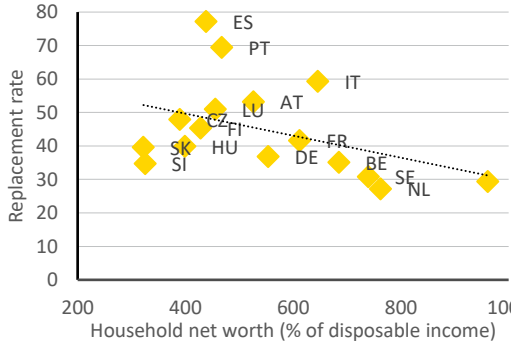
Dutch pension funds invest less than their Swedish peers in equities, the average share of total assets being around 17%, although it rises to 35% if equity investment funds are included. This is partly due to the defined benefits nature of the plans. Considering the larger size of Dutch pension funds, this still means that they play an important role in supporting the domestic stock market. Total Dutch pension assets amounted to €1,548 billion in Q4 2023 (150% of GDP).

Observations on the Swedish and Dutch experience

Both countries have a high share of funded retirement savings and high stock market capitalisation, indicating that funded pension plans have contributed to market development. Funded schemes provide higher pension payouts when invested in assets that yield a high return over time, and stock markets are a natural vehicle for this. The ample availability of pension capital in Sweden and the Netherlands, coupled with relatively flexible investment mandates for pension fund managers, has been identified as a catalyst for the growth of their domestic stock markets.[53] This link is more generally supported by empirical studies on the role of pension funds in driving venture capital investments, new business creation and stock market development in the US. (Gompers and Lerner, 1999; 2001).

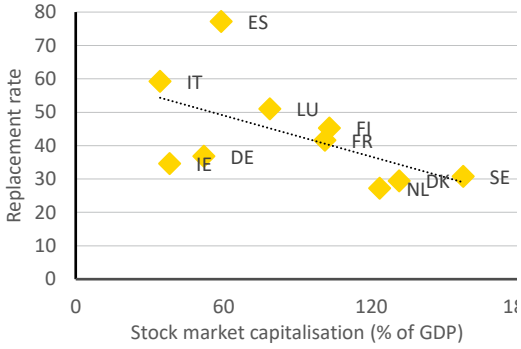
Figure 13

Household net worth and replacement rates (in %)



Note: Data on household net worth are as per Q4 2021, while replacement rates are for 2022.
Sources: OECD, European Commission report on ageing and pensions

Stock market capitalisation and replacement rates (in %)



Note: Stock market capitalisation to GDP is averaged over 2014–2022, while replacement rates are for 2022.
Sources: World Bank, CEIC, European Commission report on ageing and pensions

The high share of funded retirement savings stems from reforms that capped public pension payments.[54] In Sweden, the retirement income provided by the state PAYG

[53] How Sweden's stock market became the envy of Europe, Financial Times, April 18, 2024.

[54] Note that some European countries, like Italy, have made a switch from unfunded public PAYG schemes to funded public defined contributions schemes. State pension funds in Italy manage large investment portfolios as a result of

scheme is capped at a level corresponding to twice the subsistence wage and in the Netherlands to 70% of the minimum salary. Mandatory or contractual contributions from employers to occupational pension plans have also played an important role in driving scale, both in Sweden and the Netherlands. More broadly, and beyond these two countries, there is a negative relationship between the generosity of public pension schemes on the one hand and financial wealth and stock market size on the other hand (Figure 13). Countries with less generous PAYG schemes provide more incentives for funded retirement savings, which serve to increase household wealth and contribute more retail capital for the development of local stock markets.

However, the experience of countries such as Germany and Ireland also suggest that a low replacement rate in PAYG schemes is not a sufficient condition to drive a transition towards funded retirement schemes and stock market development on its own. In Germany, supplementary voluntary and occupational pension schemes have failed to achieve widespread adoption despite reforms that have lowered the PAYG entitlements; complexity, lack of incentives, and limited public awareness have been identified as barriers.[55] This suggests that appropriate incentives for contributions are equally important.

The investment mandate of pension fund managers may severely limit the amount that can be invested in SMEs. Although there might not be specific restrictions against investments in SMEs, requirements to provide guaranteed returns de facto constrain the ability of fund managers to seek higher (and riskier) returns. The impact of these mandates is clearly visible by the differences between the occupational pension industry in the Netherlands on the one hand and the Nordic countries on the other; since the latter have a higher share of defined contribution schemes with lower investment guarantees, Nordic pension fund managers can invest more in equities. The active portfolio management approach also allows them to invest more freely in early-stage financing for SMEs.

Strict investment mandates for institutional investors may forestall corporations' access to early-stage financing. On average, US start-up companies tend to raise substantially more capital than their EU peers, especially in the initial funding rounds.[56] Moreover, the size of the European venture capital market still pales in size compared to the US, despite a seven-fold increase between 2010 and 2020 (Figure 14). The growth of venture capital funds in the US over the last few decades has notably been attributed to a change in the regulation of pensions funds in 1979, allowing them to take more investment risk.[57] A recent statement by the Franco-German Council of Economic Experts accordingly makes a recommendation to raise and standardise investment limits for pension funds, to allow them to invest more freely in unlisted securities.[58]

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this, but they have a more conservative asset allocation compared to Nordic occupational pension fund peers, meaning that they do not contribute as much to the development of local equity markets. Switching from PAYG schemes to a higher share of funded pensions is thus not sufficient in itself to support stock market development; the fund managers need to be given an investment mandate that allows them to pursue an asset allocation more conducive to growth-enabling long-term investments.

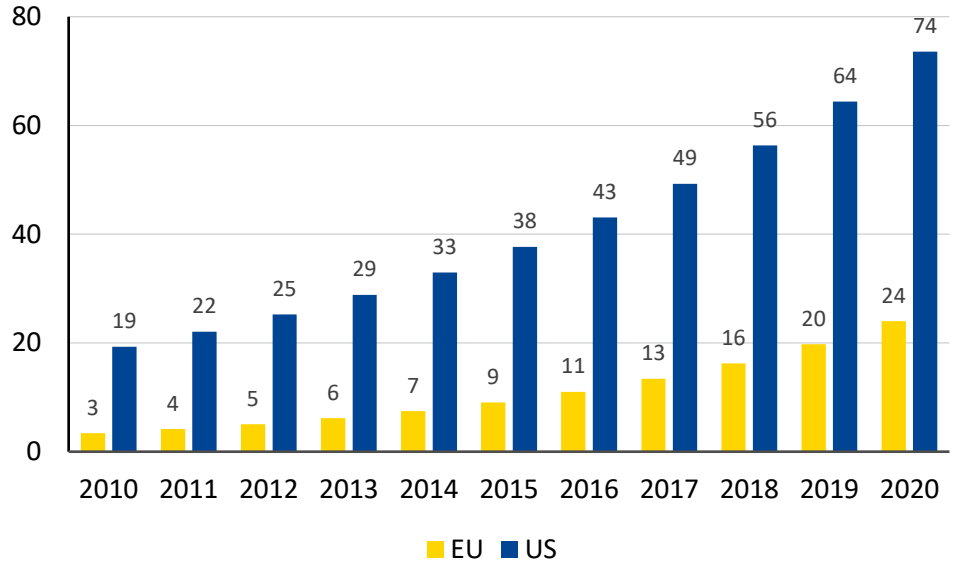
[55] Nöh et al, 2023.

[56] According to Crunchbase data, during 2012–2020, European seed-stage start-ups obtained on average between two-thirds and three-quarters of the funding raised by their US peers.

[57] Gompers and Lerner, 1999.

[58] Enhancing EU Capital Markets, joint statement by the Franco German council of economic experts

Figure 14
Venture capital market size
(in USD billion)



Note: While the European venture capital market has grown faster than that of the US in the past decade, this was mostly driven by a base effect and has not sufficed to meaningfully narrow the gap.
Sources: Pitchbook and different databases and ESM Staff calculations

Promoting a shift to more funded pensions

The above case studies highlight pension system reform as a priority to further CMU, supported by a wealth of research and in line with numerous other policy recommendations. The Letta, Noyer, and Draghi reports make similar observations about the role that retirement savings could play in financing Europe's investment needs, but they focus more on the potential of new European savings vehicles. While acknowledging the potential for such vehicles to increase cross-border investment, we emphasise how national reforms that set an upper limit on the pension entitlement of PAYG schemes are crucial for promoting an increase in the share of funded pensions and, in turn, deepening capital markets.

The scale of Europe's investment needs is substantial and increasing the share of funded pensions can help to finance them. To be clear, we do not propose transitioning entirely to a funded retirement system, as this would be prohibitively costly and unrealistic. But reforms that lower the maximum pension entitlement of national PAYG schemes could drive an increase in supplementary funded pensions and thereby enhance EU capital markets, while simultaneously making pension systems more resilient to ageing populations. However, pension systems are subject to national legislation, so decisions to reform them will need to be made by national governments

Reforms that lower the pension entitlement of PAYG schemes should be complemented by mandating or strengthening incentives for occupational pension schemes. In the Netherlands, employer contributions to occupational pension schemes are mandatory by law for most sectors, while in Sweden they are set out in labour market agreements. Making employer contributions to occupational pension schemes mandatory by law may not be feasible in all countries, and the role of collective bargaining in Sweden may not be replicable elsewhere. Another option is to introduce auto-enrolment schemes, whereby employees are automatically enrolled in

a pension scheme upon employment but given an option to opt out. These have proven particularly successful in the UK; private sector pension participation by UK employees increased significantly following the introduction of auto-enrolment in 2012, from less than half to 86% of private sector eligible employees in 2020.[59] The impact of auto-enrolment on pension scheme take-up is also supported by studies in behavioural finance, suggesting that participation can be increased by 25 to 35 percentage points.[60] The introduction of auto-enrolment schemes across EU Member States, where occupational pensions are not yet mandatory, accordingly features as a key policy recommendation in numerous CMU reports.[61]

In addition to occupational pensions, it may be worthwhile to consider incentives for contributions to personal pension plans. To encourage households to save in this way, contributions up to a certain threshold can be made deductible from income taxation.[62] An alternative could be to tax payouts from personal pension plans in retirement at a lower rate than other sources of income.

Financial stability and other considerations

In addition to increasing the amount of funded retirement savings available to meet European investment needs, reforms that reduce the PAYG component of public pensions will help cope with demographic changes.[63] The ageing population is one of the major long-term challenges for European economies and will have profound implications for financial stability, as it affects, growth, savings, future interest rates and asset prices. In a previous contribution by the ESM to this debate,[64] we highlight the financial stability implications of an ageing population. Over the coming decades, countries with generous PAYG schemes will face considerable fiscal strain from projected increases in the dependency ratio, which could go so far as to jeopardise financial stability. Pension reform is thus crucial to safeguard financial stability, improving the long-term resilience of the euro area to external shocks, while helping to finance needed investments as an additional benefit.

Wider retail participation of the middle and poorer segments of the population in private pension vehicles will also help reduce inequalities in wealth distribution. At the same time, increasing the share of funded pensions can make lower income households more vulnerable to poor investment performance in their retirement savings. To mitigate this risk, a reform that puts a cap on PAYG pensions may be combined with strengthening the minimum provisions under the remaining scheme. For instance, the Dutch pension entitlement under the first pillar corresponds to a flat rate that is unrelated to employment income or the number of years in employment. This provides a basic income in retirement for previously unemployed and low-income

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[59] Department for Work & Pensions UK, 2020.

[60] Beshears et al, 2006.

[61] Cf. the joint statement of the Franco-German Council of Economic Experts and the report of the High Level Forum on the CMU.

[62] See Beshears, Choi, Laibson, and Madrian (2014) who find that contributions to retirement remain quasi unchanged, irrespective of the tax benefit being in the savings or in the distribution phase of the policy.

[63] According to the European Commission's latest Ageing report, public pension expenditure is expected to rise in 16 Member States during the projection period 2022–2070, mainly due to ageing populations. Cf. 2024 Ageing Report. Economic and budgetary projections for the EU Member States (2022-2070) (europa.eu)

[64] Demographics and financial stability - presentation by Rolf Strauch

households, helping give the Netherlands one of the lowest rates of poverty in old age. Such a measure would also shield lower income households from falling below subsistence levels due to poor investment returns on their retirement savings.

The creation of a pan-European pension fund should be explored as a means to reduce the home bias in investments. There is evidence of a home bias in the investment portfolios of national pension funds, lowering the overall efficiency of capital allocation.[65] In this context, it may be worth exploring the idea of a parallel pan-European pension fund, eligible for retirement savers to invest in, within the framework of their national pension schemes (occupational as well as personal and voluntary).[66] Care should be taken to ensure that the fund complies with eligibility criteria for occupational pension scheme administrators at the national level, to ensure maximum participation.[67] The limited success of the pan-European Pension Product, launched in 2022 under EU legislation, may be seen as evidence of the need to take national specificities into account to ensure that the envisaged take-up is achieved. The fund could then pool capital from several countries and be awarded a mandate to invest in a broad universe of assets, facilitating a higher degree of cross-border investments, including in the green transition.

Increasing transparency through the publication of stress tests may also help reduce reservations that people may have towards private pension providers, along with tracking systems that allow retirement savers to track the performance of their investments across different pension schemes. Stress tests of pension funds should follow a harmonised supervisory approach throughout the EU and the results should be published and made available to the public. This will help retirement savers make better decisions when choosing pension fund providers and give pension funds incentives to make balanced investment decisions. Online tracking systems can also play a key role in increasing transparency around investment performance of pension funds. Both measures should be supported by greater financial education, enabling retirement savers to make better investment choices.

Pension funds are a strong fit for financing Europe's investment needs, but financial stability implications need to be considered. A significant share of these investment needs will be in the form of early-stage equity financing for startups in the digital and technology sectors. Broadly speaking, financial stability stands to gain if equity financing is provided by investors with a long-term horizon. Pension funds differ from banks in having longer duration of their liabilities, granting fund managers sufficient time horizons to consider early-stage equity investments. But the flexibility to invest in risk-bearing assets also depends on the extent of investment guarantees provided to policyholders. Pension funds that promise high investment guarantees may find themselves forced to sell off equity holdings in scenarios with large downward market value adjustments, causing further amplification of the initial shock. This points to the importance of striking an appropriate balance between the investment guarantees promised to retirement savers and the degree of investment risk pursued by the pension fund. The solvency capital requirement under the EU's Solvency II rules ensures that life insurers adhere to a minimum standard with respect to that balance. However, occupational pension funds in most Member States are under EU rules

[65] According to a report by New Financial LLP, the home bias of European pension funds corresponds to a factor of around 20 times the weight of their domestic stock market in the MSCI World index.

[66] For instance, employees in the Nordic countries can typically choose from a predetermined list of pension managers selected by the administrators of their occupational pension plans.

[67] A similar point is made in the European Commission communication on a savings and investments union.

covering Institutions for Occupational Retirement Provision (IORP) regulation, and as such are not subject to the Solvency II solvency capital requirement.

The IORP directive does not set down any standards for a risk-based capital requirement but includes provisions for Member States to develop national regulations in the area. National authorities that consider a shift to funded occupational pensions should also consider developing national regulations for risk-based capital requirements, to ensure that pension funds strike an appropriate balance between investment guarantees promised to policyholders and the investment risk pursued by the fund manager. Moreover, and as noted in Chapter 2, further growth in non-bank financial intermediation could lead to an increase in specific types of systemic risk, prompting a review of the macroprudential framework for non-bank financial institutions.

A shift from unfunded PAYG pensions to funded schemes would likely lead to higher household savings during a transitional phase. This is because PAYG pensions are essentially a transfer from the working population to those in retirement, while funded pensions are financed out of workers' accumulated savings. In Sweden — which started a transition towards funded retirement schemes in the 1990s and where a considerable share of household savings is now in occupational and personal pension vehicles — the average household savings rate was 15.9% during 2012-22, significantly higher than the EU average of 12.7% over the same period. [68]

Higher saving rates induced by pension reforms could yield additional capital of €350-€400 billion a year. The switch discussed above could meaningfully increase the amount of capital available to meet Europe's financing needs. Assuming that the average saving rate across the EU increases to the same level as that of Sweden — by about three percentage points — this would generate €350-€400 billion annually.

Costs of moving from PAYG to funded pensions systems

While the benefits of pension system reform are substantial, it also entails transitional costs. During a transition period, certain cohorts will be paying both fees to finance the pensions of those already in retirement and contributions towards their own future pensions.[69] Shifting to a higher share of funded pensions is therefore likely to lead to lower household consumption in the short to medium term, since the increase in the savings rate will not be immediately offset by lower fees to finance pensions for those already retired. However, there will be a related shift in the composition of GDP towards a higher share of investment, as long as the additional savings are used to finance Europe's investment needs. If these investments raise productivity, as intended, the impact on long-term growth will be positive. The short-to medium-term impact on consumption may also be mitigated to the extent that higher investment activity provides a boost to asset prices and households adjust their expectations about future income and growth (see Box 4 for further detail).

[68] According to Riksbanken (2023), premium and occupational pensions account for the largest component of Swedish household savings, followed by real investment (mainly housing) and households' own financial savings.

[69] Cf. Barr and Diamond, 2008 for a discussion.

Box 4: The macroeconomic impact of a transition toward more funded pensions *(by Mathias Skrutkowski and Konstantinos Theodoridis)*

The core argument of this chapter is that by increasing the share of funded pensions, more long-term capital will become available to finance investments needed to raise productivity in Europe. Investment-specific technology shocks have been identified as key drivers of growth and the business cycle.[70] Bianchi et al. (2019) identify equity financing shocks as having a stronger impact on investment in research and development and long-term productivity growth, while debt financing shocks have a stronger impact on investments in physical capital. This is because banks prefer collateralised lending, making equity more suitable for financing investments in intangible capital, like research and development. Hence, there is reason to believe that pension reforms that foster equity-like investments could meaningfully boost investment in research and development and long-term productivity growth.

However, as highlighted above, shifting to a higher share of funded pensions entails transitional costs, as some cohorts of the population will be paying both the fees to finance the pensions of those currently in retirement and the contributions towards their own future pensions. While this is likely to cause a drop in household consumption in the short to medium term, the aggregate impact depends on the speed and scale of the transition, as well as the extent to which markets and households adjust their expectations about future income, productivity and growth.

For countries that only make small or gradual adjustments to the PAYG replacement rate and provide limited incentives for occupational pension contributions, there will only be a limited increase in the share of funded pensions, with limited transitional costs and short-term impact on consumption. However, the long-term benefits in terms of fiscal sustainability and capital made available to finance productivity-enhancing investments will also be lower. Thus, there is a trade-off between the short-term costs of pension reform and the long-term benefits to growth and fiscal sustainability.

To the extent that higher investment activity in Europe results in swift productivity gains, asset prices should increase on expectations of higher future profits and growth. This could mitigate the short-term impact on consumption via a wealth effect, as households may feel more optimistic about their future income and wealth, choosing to borrow or lower their savings in other assets (e.g. through renegotiating mortgage terms) to maintain or even increase current consumption levels. This mechanism has been elucidated in the endogenous growth literature, e.g. in Bianchi et al. (2019), where a positive investment shock is found to increase output more than in standard dynamic stochastic general equilibrium models, generating a positive consumption response. It should be noted that if the postulated increase in investment activity is not matched by an increase in domestic savings (with a corresponding drop in consumption), it would lead to a reduction in net exports and potentially an increase in external debt; in the latter case, part of the investment activity and/or household borrowing to maintain consumption would be financed by external debt. However, in the longer term, this would be offset by increased productivity and higher growth.

We have used an endogenous growth model to simulate the impact of raising the volume of investments in the euro area by an additional €800 billion per year until 2030 (see Fig 15). This corresponds broadly to the investment needs discussed in the

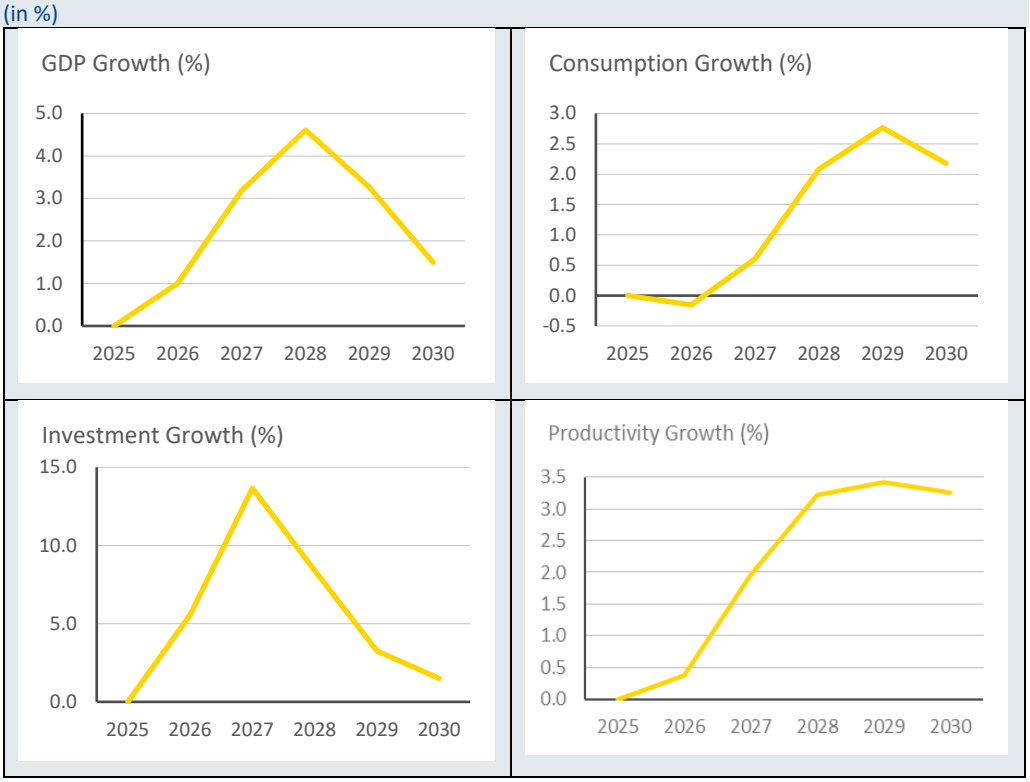
[70] Justiniano et al., 2010; Mandelman et al., 2011; Schmitt-Grohe and Uribe, 2011.

Draghi, Letta, and Noyer reports. We have furthermore assumed that half of these investments would be for research and development and the other half would be in physical capital. It should be noted that the volume of additional investments is large relative to the baseline, increasing the share of investment to GDP by five percentage points from 3% to 8%. It is not realistic to assume that the investment rate will be raised to this level from one year to the next. As such, the simulation should be seen more as a stylised illustration of the trade-offs between consumption, growth, and investment rather than a realistic macroeconomic scenario.

As the charts in Figure 15 demonstrate, there is a relatively modest drop in consumption growth (corresponding to -0.2%) during the first year of the projection horizon, following which consumption growth increases relative to the baseline, while the impact on GDP growth increases gradually to reach a peak in 2028. In other words, despite a near threefold increase in the investment ratio, there is only a marginal fall in consumption during the first year, after which it actually increases compared to the baseline. The limited decline in consumption is due to households adjusting expectations about higher future productivity and income. The increase in consumption and investment demand are initially met by an increase in external borrowing, causing a reduction in the trade balance and an appreciation of the exchange rate. This continues until productivity and household income rise sufficiently to align with demand, after which the exchange rate depreciates and the initial trade deficits turns into surpluses.

Putting this in the context of the shift to funded pensions discussed in this chapter, the results could be interpreted such that the impact of transitional costs of pension system reform on household consumption may be offset by household expectations of higher productivity and income growth from the investments that the incremental flow of retirement savings would facilitate. Initially, households would borrow to maintain consumption levels, until productivity and income growth catches up to align with demand.

Figure 15
Simulated impact on baseline growth rates for GDP, consumption and investment
(in %)



Policy considerations

While the prospect of a reform that forces European households to consume less and save more may seem daunting, alternative policy options for managing Europe's demographic transition are equally or more costly. A study by Heer, Polito, and Wickens (2023) shows that most EU Member States have limited space to increase taxation as a means of financing the projected increase in the cost of PAYG pensions. They also find evidence that reforms which reduce the replacement rate make the pension system more resilient to ageing, compared to those that delay the retirement age or require additional financing.

While European institutions can play an important coordinating role, most decisions will rest with national governments. Since pension systems are subject to national legislation, European institutions have limited scope to achieve meaningful reforms through top-down directives. However, we present several policy measures at the national and EU level to achieve the envisaged transition.

Policy considerations for national authorities:

(vi) **Capping the retirement income from public PAYG schemes.** Some countries have already taken steps to reduce the share of retirement income guaranteed in the future by public PAYG schemes. However, with significant fiscal challenges from ageing populations, more needs to be done, with large potential fiscal gains for countries facing ageing populations. While the political challenges should not be underestimated, countries providing generous PAYG schemes could consider either capping the benefit or switching to a flat rate system.

(vii) **Mandating or strengthening incentives for funded retirement savings.** To fill the gap left by a shrunken PAYG scheme, it may be necessary for national authorities to either mandate employers to contribute to occupational pension plans, as in the Netherlands, or introduce auto-enrolment schemes.

(viii) **Limiting the extent of investment guarantees.** While investment guarantees are appealing to the public, limiting their extent would enable pension fund managers to take more investment risk and generate higher returns in the long run. Protection for lower income deciles could be strengthened by introducing a minimum pension entitlement under the first pillar.

(ix) **Enabling public and private pension funds to pursue more active management of their assets.** Allowing for an active portfolio management approach would also enable pension funds to contribute more flexibly to early-stage SME financing, via investment in unlisted equities. Risks could be diversified by expanding the range of investable asset classes available to pension funds.

(x) **Developing a national risk-based capital requirement for occupational pension funds that are subject to IORP regulation.** Occupational pension funds in most Member States are under IORP regulation, and as such not subject to the Solvency II solvency capital requirement. National authorities in Member States that consider a shift to a higher share of funded occupational pensions should consider developing national regulations for risk-based capital requirements, to ensure that pension funds strike an appropriate balance between investment guarantees promised to policyholders and the investment risk pursued by the fund managers.

(xi) **Concurrently with greater investment flexibility, pension funds should increase their transparency regarding the performance of their investments**. In this regard, pension funds should conduct and publish stress tests of likely scenarios for their investments. National pension authorities should also pursue the creation of tracking systems, whereby retirement savers can follow the performance of their investments across different pension schemes.

At the European level, the onus should be on facilitating cross-border investments by pension funds:

(xii) **Foster or create pan-European pension funds to reduce the home bias in the fund industry.** To reduce the home bias in the investment portfolios of national pension funds, it may be worth exploring the idea of a parallel pan-European pension fund, eligible for a broad cross-section of retirement savers to invest in, within the framework of their national pension schemes. However, caution should be exercised in imposing limits on investments outside Europe, as this may only serve to make the fund less popular and thus lower the inflows.

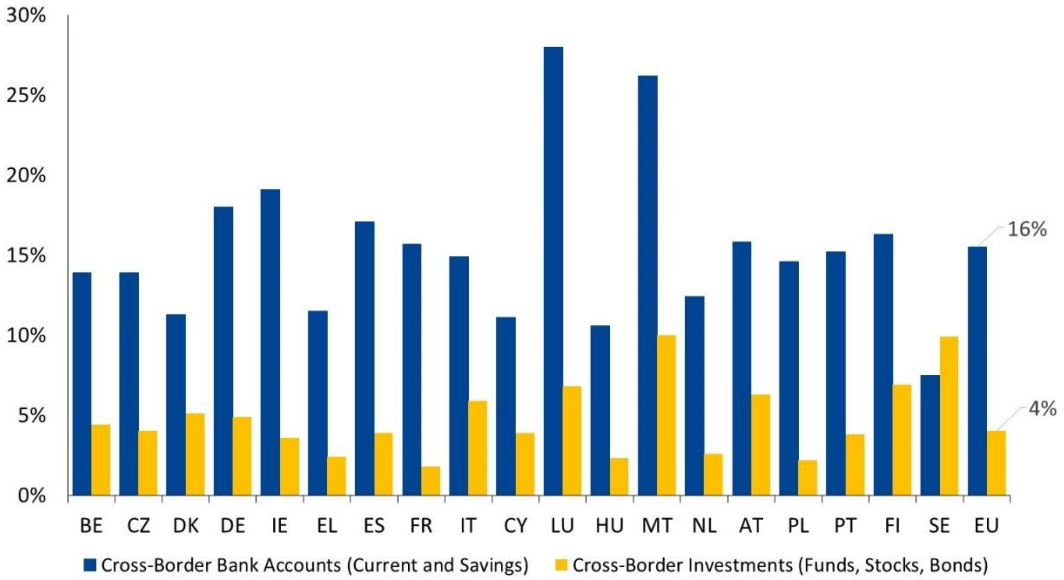
4. Cross-border retail investments: where are the missing links?

A clear objective of CMU is to increase cross-border financial integration in the EU. In this chapter we explore whether integration is lacking and areas where action may be required.

Direct cross-border retail investment

Cross-border retail investments remain remarkably small in the EU, even after more than two decades of monetary union. Survey data shows that only 4% of respondents have acquired an investment product (stocks, bonds, or mutual funds) in another EU country, compared to 16% having opened a bank account abroad (Figure 16). The discrepancy between ownership of a foreign bank account and a foreign investment instrument is quite large in all Member States. Of course, this figure underestimates somewhat the amount of total existing cross-border retail investments, since some of these are channelled via internationally oriented mutual funds (see next subsection).

Figure 16
Retail cross-border financial assets
(% of respondents holding the asset)



Notes: For holdings of bank accounts and investments, the Eurobarometer survey specifically asked, "Which of these products and services did you purchase in another EU Member State?" Data as of October 2022.
Sources: Eurobarometer 'Retail Financial Services and Products' (data.europa.eu) and ESM Staff calculations

Although obstacles to investing abroad have diminished in recent years, European retail investors continue to shun cross-border investments. Although it contradicts the goal of an efficient portfolio,[71] home bias, that is the preference for domestic alternatives, remains an important driver in investment decisions.[72] In the past, transaction costs and exchange rate risk have been proposed among explanations for this observation.[73] However, with recent technological innovations as well as the euro as a common currency for most Member States, this no longer appears to be the case. Similarly, investor risk-

[71] According to portfolio theory, an efficient portfolio describes the best risk-return ratio a portfolio can attain through combining different assets. In this sense, limiting oneself to only domestic assets, can never be efficient (see. Markowitz, 1952).

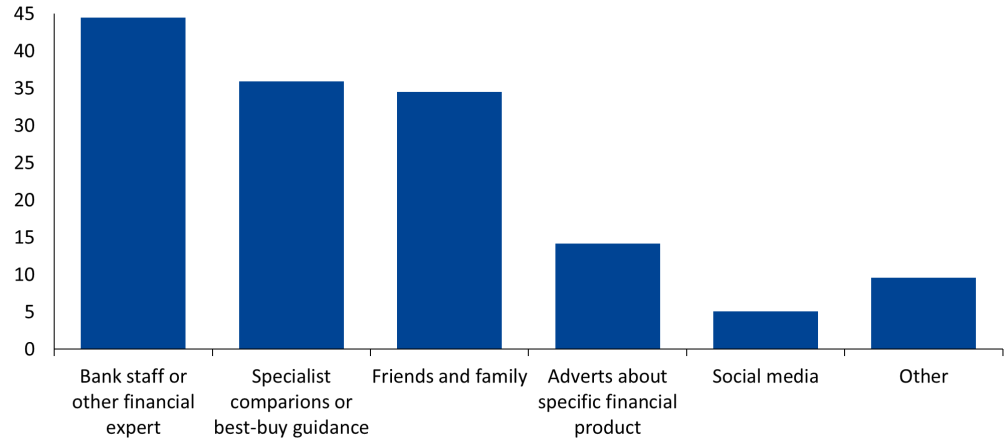
[72] See one of the earliest mentions in the work of French and Poterba (1991).

[73] See the work of Tesar and Werner (1995), whose results were confirmed by Warnock (2001).

aversion seems insufficient to explain this observation. "Relative optimism" has emerged as possible further explanation for continued resistance toward investing abroad. Originating in behavioural finance, the concept refers to the tendency of individuals to be overly optimistic about matters with which they are familiar, such as investing in shares of domestic firms.[74] In this context, financial literacy education can play an important role in making people aware of this bias. Residual investment frictions should be addressed to the extent possible.

The lack of promotion of international investments could partially explain their low take-up. About half of Europeans surveyed report that they rely on their bank to make decisions affecting their personal finances (Figure 17). One could expect that local banks would promote their own products and seldom recommend non-bank products, especially those oriented abroad. Also against this backdrop, to advance towards a well-integrated CMU, greater financial education is needed to encourage retail savers to consider a wider choice of financial products, included some abroad.

Figure 17
Sources of personal finance advice
(% of respondents)



Notes: Survey asked question: What sources of information do you use when making decisions about your personal finances? Data is from October 2022.
Source: Eurobarometer

Cross-border retail investments through investment funds

Besides directly acquiring investments abroad, retail investors access cross-border assets via funds that are active in several jurisdictions. Such funds would be considered cross-border because they are either registered for sale in several jurisdictions and/or they offer investment exposure to more than one country. These investment structures would therefore offer several ways for retail investors to gain cross-border exposure. Domestic oriented funds buy assets in the same country as they raise funds; cross-border funds via point of sale buy assets in a single country but raise funds in several; cross-border funds via asset allocation buy assets in several countries but raise funds in only one; and fully active cross-border funds both buy assets and raise funds in several countries. This

[74] See French and Poterba (1991). While Rubbaniy et al. (2014) theorise that this effect may be even stronger in times of uncertainty, Solnik and Zuo (2017) have shown relative optimism to persist in both bull and bear markets, as well as for bonds, currencies, and equities alike.

classification refers to actual locations of sale and investment, not to the legal domicile of funds, which may be in a foreign jurisdiction purely for regulatory or tax reasons.

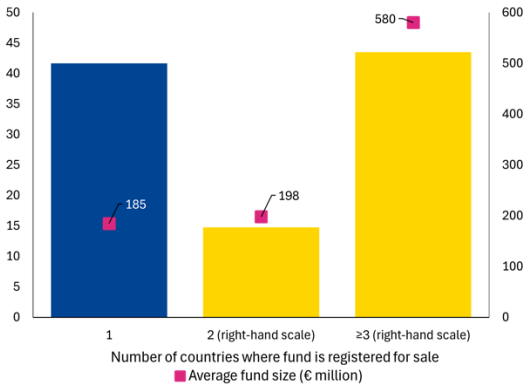
A large fraction of smaller EU funds is registered for sale in only one or two jurisdictions, while larger funds operate in more countries. Funds that market themselves in only one EU country account for 42% of the total, while those registered in two jurisdictions only for 15% (Figure 18a). Of the latter, many are registered for sale in the jurisdiction where they are domiciled for tax-advantage purposes and hence may not intend to raise funds in that country. In that sense, they may not operate as cross-border funds from a point-of-sale perspective. On the other hand, about two fifths of EU-domiciled funds are registered for sale in three or more countries, thus providing — in principle — a vehicle for retail savers to invest across the EU.

Asset diversification across EU countries is rather low. Most funds that invest cross-border do so in a small number of jurisdictions and with a strong bias towards only one. The concentration of funds' portfolios stood at about 0.3 on the Herfindahl index for funds that invest between 10% and 70% of their assets in the EU. Such a level stems from a relatively small number of investment destinations and/or a high concentration in one of those destinations. This lack of geographic diversification is even higher for funds that invest over 70% of their assets in the EU.[75]

Figure 18
Cross-border activities of EU-domiciled investment funds
(at end 2023)

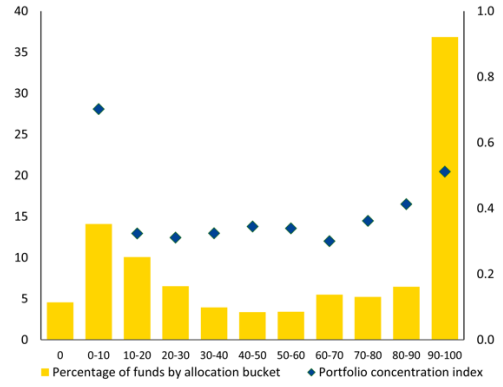
(a) Points of sale and average fund size

(left-hand scale in % of funds, right-hand scale in € million)



(b) Portfolio allocation within EU by EU-domiciled funds and country-concentration

(left-hand scale in % of funds, right-hand scale in Herfindal index)



Notes: Figure 18b shows the fraction of EU-domiciled funds that invest within the EU, broken down along the x-axis by the percentage of their assets held in the EU and indicates the degree of portfolio concentration in each decile, ranging from 0 (highly diversified) to 1 (highly concentrated). Values above 0.5 indicate investments in no more than two jurisdictions and those between 0.33 and 0.5 indicate no more than three countries. So, 35% of EU-domiciled funds invest at least 90% of their portfolio within the EU, with a concentration index of 0.5.
Sources: Lipper database and ESM Staff calculations

[75] Gossé and Jehle (2024) point in a similar direction and show that the risk-return relationship of many European investors could improve even if they were to only broaden their diversification within Europe, as Central and Eastern European stock markets are often underweighted, speaking to the call for a deeper integration between European capital markets.

Impediments to cross-border investments

Taxation and insolvency rules impede cross-border investment

The procedures for claiming withheld cross-border taxes on investment income are cumbersome and slow, creating a strong deterrent to international retail investment. Most states withhold the tax portion of dividends and interests paid to non-residents, even as these investors are also taxed on this in their country of residence. While bilateral tax treaties aim to avoid this double taxation, procedures for reclaiming this income vary considerably across countries, and are typically lengthy, cumbersome, and costly. This has often been identified as a key factor deterring European cross-border investment.[76]

The European Council has recently agreed on safer and faster procedures to obtain double taxation relief through the FASTER initiative, but the timeline for implementation is relatively lengthy. Member States must transpose the directive into national legislation by the end of December 2028, with these national rules to become applicable from 1 January 2030. Given the importance of this reform for increasing cross-border investment flows, options should be explored to fast-track the legislative process.[77]

Harmonisation of European insolvency regimes would bolster the willingness to invest across borders. A common theme for Letta, Noyer, and Draghi is that cross-border investments may be deterred by prospective investors' lack of familiarity with host countries' insolvency law. Similarly, research by Becker and Josephsson (2016) suggests that poorly functioning insolvency regimes hold back the corporate bond market from developing, especially when it comes to riskier, high yield issuers. The authors go on to argue that this explains why corporate bonds make up a larger share of corporate financing in the US, which has a more efficient insolvency procedure than in Europe and Asia. Becker and Ivashina (2022) argue that weak insolvency rules may drive "zombie lending", where banks continue to extend cheap loans to existing, less productive clients at the expense of lending to new, more dynamic firms to avoid driving the former into default. Taken together, these findings suggest that strengthening and harmonising European insolvency regimes could:

- increase the share of cross-border investments in Europe;
- improve access to capital markets funding for smaller and riskier borrowers, lowering their cost of funding;
- speed up insolvency procedures, thus freeing up capital more quickly for reallocation; and
- reduce incentives for zombie lending, improving resource allocation.

Several proposals to harmonise European insolvency law have been made in the Letta, Noyer, and Draghi reports. While the European Commission has proposed a directive aiming to harmonise certain aspects of EU insolvency law, it has still to be approved by the European Parliament.[78] At national level, the required legal reforms are complicated

[76] See, for example, Developing European capital markets to finance the future | Direction Générale du Trésor (economie.gouv.fr)

[77] Under the FASTER initiative, a new European Commission directive will introduce a common EU digital tax residence certificate that investors could use for fast-tracking relief from withheld taxes.

[78] Harmonising certain aspects of insolvency law in the EU

and interconnected with other areas of legislation, meaning that progress may take time. Given this, we see significant merit in the proposal by Enrico Letta to create a European Code of Business Law, in parallel to existing national legislation. As explained in the Letta report, firms would be free to choose if they will use a new European instrument. To the extent that such a regime would create more transparent and fair outcomes of insolvency proceedings, firms and investors will develop a preference for the European regime over their national one, which over time may give rise to greater convergence of national legislation. However, the success of such a regime hinges on the quality and predictability of court outcomes. Adequate training of judges and lawyers in national judiciaries would be an important aspect of the reform. A common EU court to handle insolvency cases under the European code might also improve predictability.

Policy considerations

Policy considerations for European authorities:

(xiii) **Exploring options to speed up the passing and implementation of the FASTER directive.** Given the importance of this reform for increasing cross-border investment flows, options should be explored to fast-track the legislative process and take all necessary actions to remove other tax and administrative barriers to cross-border investment.

(xiv) **Harmonising national insolvency frameworks.** Divergent national insolvency rules deter cross-border investments. More transparent and predictable insolvency outcomes could also increase cross-border investments in Europe and improve access to market financing for smaller and riskier borrowers. Since progress may take time to materialise on the national level, we see merit in creating a parallel European insolvency regime, as suggested in the Letta report. To ensure it is successful, priority should be given to training judges and lawyers. It may also be worthwhile setting up a common court to handle insolvency cases under the new European code.

5. Banks as part of the capital markets solution: securitisation of SME loans

So far, we have looked at ways to promote the development of European capital markets as an alternative to bank funding that can better provide some of the investment Europe needs in its quest for productivity and growth. Bank lending and equity financing are complementary, however, and in this chapter we focus on how banks themselves can nurture CMU by converting SME loans into investible European capital market instruments.

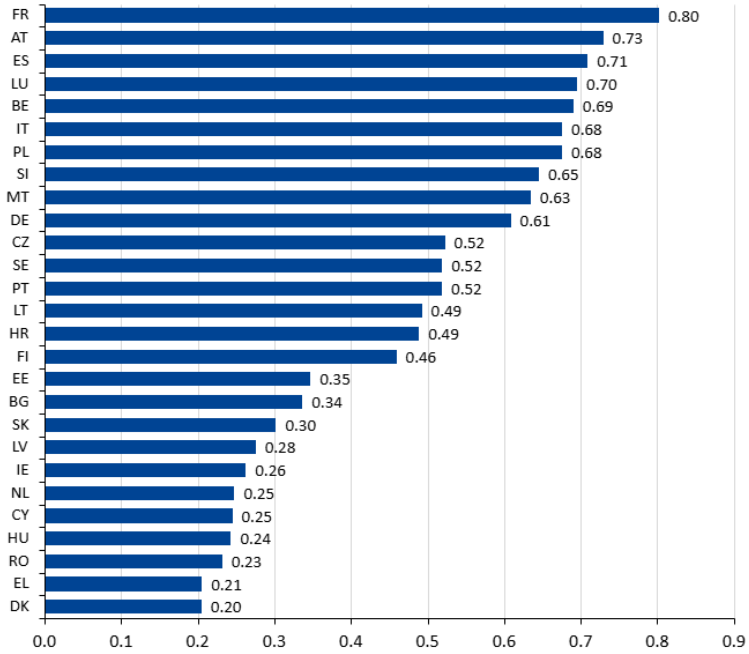
Spreading risks and opening up opportunities via the banking sector

SMEs are arguably the backbone of the European economy. They mostly rely on bank credit and founders' capital to finance their growth and operations. Several studies have documented the disproportionate reliance of European SMEs on loans and other forms of credit (Figure 19). Although this heavily intermediated funding model has worked well over the past decade, it may limit the ability of the European economy to create new firms, generate employment, and yield higher productivity gains.

Securitisation could enhance CMU in Europe by spreading risks away from the banking system and opening up investment opportunities to a larger investor base[79] Securitisations help banks raise funding, free up capital, and provide investors a wide range of investment tranches, allowing them to choose their preferred levels of risk and return. They can also open domestic lending markets to a higher degree of cross-border investment.

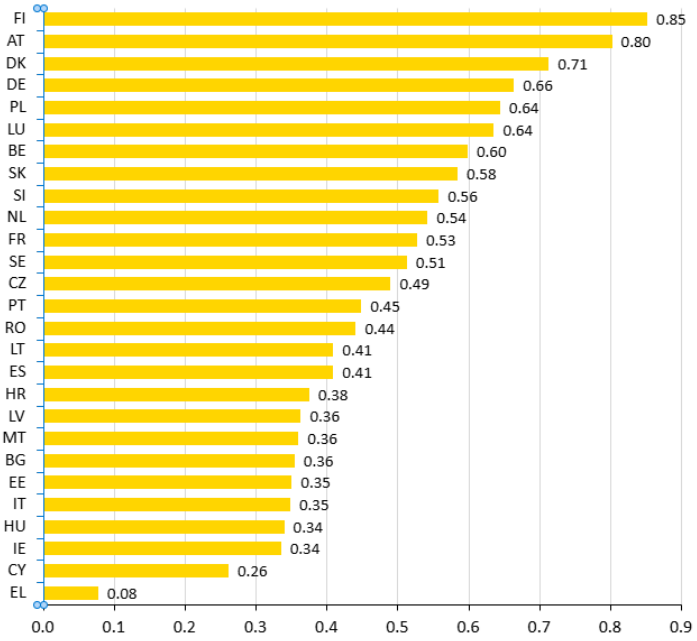
Figure 19
FSME access to finance by instrument
(2013–2023 average)

Loans

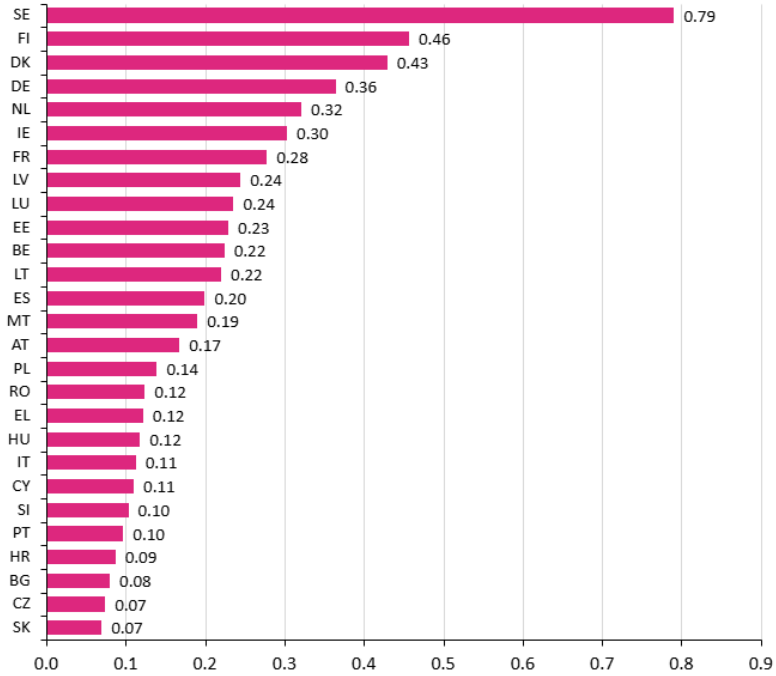


[79] Securitisation consists in pooling various types of debt instruments — such as mortgages, auto loans, and credit card receivables — into a portfolio, which is transferred to a special purpose vehicle. The special purpose vehicle issues securities backed by these assets and sells them as bundled securities to investors. This process allows the originators to enhance liquidity while transferring both the assets and the associated risks off their balance sheets.

Credit and leasing



Equity



Notes: The European Investment Fund's SME Access to Finance index is a composite indicator summarising SME financing conditions for each EU Member State. Rating from 0 to 1, the higher the score, the more favourable are firms' financing conditions compared to those available in other Member States. Loans comprise bank term loans, typically with a fixed repayment schedule and medium-to-long maturities; credit and leasing reflect shorter-term revolving credits such as overdrafts and credit lines, as well as leasing products; equity focuses on the availability of venture capital, private equity, and similar equity-based funding. For details and caveats regarding interpretation of the indices see Gvetadze et al. (2018) and Kraemer-Eis et al. (2023).
Source: European Investment Fund

Contrasting approaches to securitisation in Europe and the US

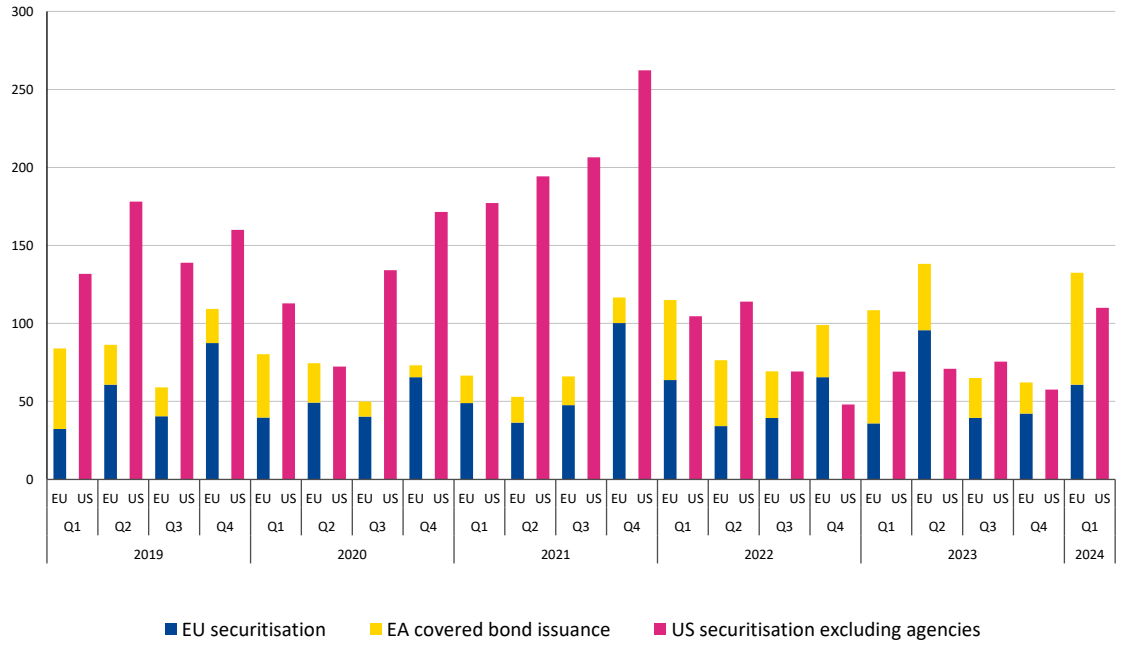
Despite these benefits, the European securitisation market has stagnated. This lacklustre activity stems partly from stigma dating from the 2008 financial crisis, when

securitised products were heavily implicated leading to investors being exposed to greater risks than they had expected. Moreover, European banks also rely on a mature covered bond market, which in certain aspects provides a substitute for securitisation by allowing them to raise funds on favourable terms by using a pool of assets as collateral.

Securitisation is much less developed in Europe than in the US, although precise comparison is not straightforward. Issuance of US securitised instruments is dominated by agency mortgage-backed securities (MBS) — paper backed by mortgages provided by federal home loan agencies. This is of the order of €500 billion a year. Stripping out agency mortgage-backed securities, however, securitisation flows in the US since 2022 are comparable to those in Europe, if covered bonds are included (Figure 20). In 2023, some €400 billion of securitised instruments and covered bonds were issued in the EU.

Further structural differences also affect cross-Atlantic comparisons. The Financial Services Committee noted in 2024 that the growing importance of synthetic securitisation — often conducted through private, bilateral arrangements primarily designed for regulatory capital relief — can be difficult to track. In parallel, an increasing share of securitisation transactions are privately placed, which obscures the true scale of market activity. As a result, headline figures from public sources may understate the actual volume of European securitisations. These factors, combined with the prevalence of agency mortgage-backed securities in the US, underscore that simple issuance data alone do not capture the full complexity of the transatlantic securitisation landscape.

Figure 20
EU and US securitisation issuance
(in € billion)



Note: Since 2019, US banks securitise approximately €485 billion of mortgages per year via agencies such as Fannie Mae and Freddie Mac.
Sources: Association for Financial Markets in Europe, Dealogic

Europe's covered bond market lacks some key advantages of securitisation

Covered bonds provide financing in a similar way to securitisation but do not alleviate banks' balance sheets from a capital perspective. They raise funds by issuing bonds

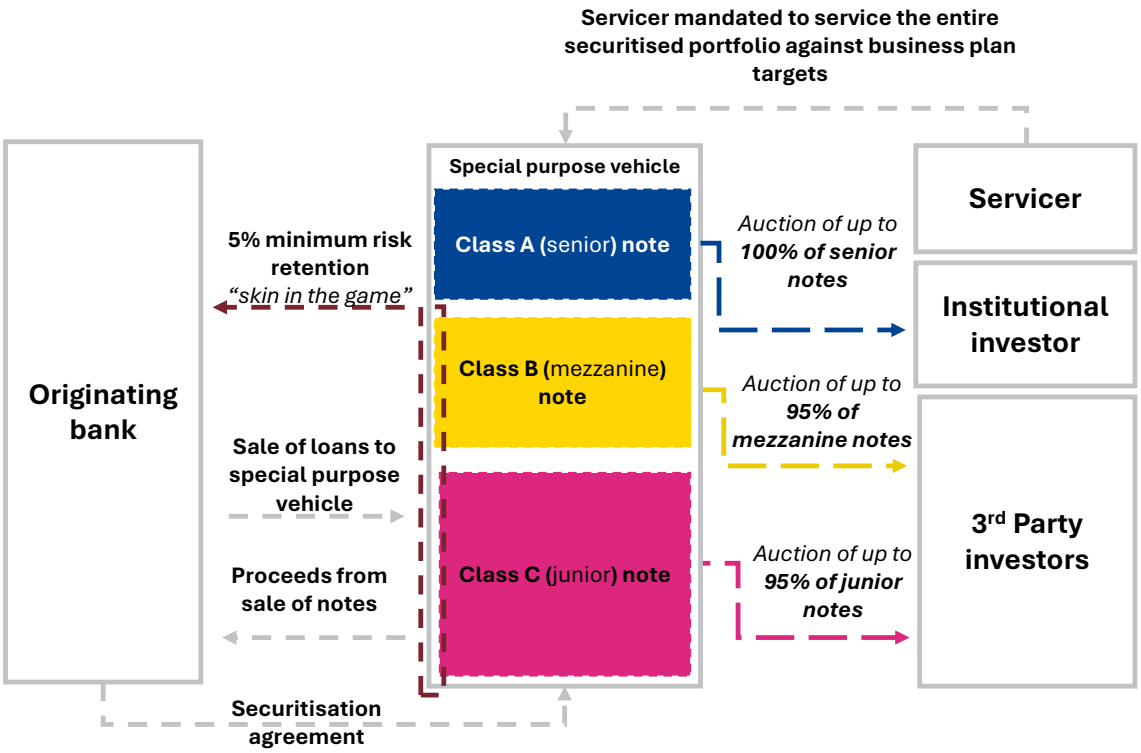
backed by a pool of assets. These remain on banks' balance sheets, retaining the associated risks and thus offering no capital relief. Covered bonds have a dual recourse feature, offering bondholders a claim on both the cover pool and the bank's general assets if the pool underperforms. In contrast, securitisations transfer the assets (or associated risk in the case of synthetic securitisation) to an external entity, offering the bank both capital and risk exposure relief.

Covered bonds are not best suited to financing SME loans, which are typically unsecured. They primarily serve to finance mortgages or other loans secured by high-quality collateral, aligning with the security requirements and investor expectations associated with covered bonds. Given that European banks heavily rely on covered bonds for wholesale financing, this preference may indirectly limit their capacity or incentive to extend credit to SMEs, as these loans do not align with the covered bond model. By expanding securitisation options, especially for corporate loans, banks could more readily transfer SME loan exposures off their balance sheets, easing their capital capacity and providing greater incentive for SME lending.

While mortgage securitisation can deepen capital markets, it does not offer the same direct boost to firm creation or productivity that SME financing does. Moreover, European mortgage finance is already supported by well-developed covered bond markets, unlike in the US, where mortgages typically rely on securitisation through government-sponsored agencies. Consequently, there is less impetus to securitise mortgages in Europe. By contrast, SME loans often lack collateral and do not align with covered bond frameworks, making securitisation far more valuable for diversifying risk, freeing up bank capital, and supporting a continuous channelling of credit to Europe's growth-oriented enterprises.

Importantly, targeting SME securitisation in the context of CMU places capital where it can spark innovation and job creation. By unlocking bank balance sheets and widening investor participation in SME loan portfolios, securitisation does more than offer a new financing instrument. It also aligns with CMU's aim of deepening cross-border markets and propelling productive investment across Member States. Funnelling resources into SMEs strengthens Europe's long-term competitiveness in a shifting global landscape, ensuring that CMU benefits not just large corporations or property markets, but also the new or expanding enterprises that will shape Europe's future growth.

Figure 21
Typical off-balance sheet securitisation structure



Sources: ESM

Reviving securitisation to support SME financing

Securitisation has a proven track record as a wholesale funding instrument for SME loans. Asset-backed commercial paper vehicles are particularly suited to SME loans, as their expected maturity tends to be shorter than for mortgages or secured loans. Since SME loans are riskier, the first loss (or junior) and mezzanine tranches need to be well calibrated to sufficiently enhance the credit quality of the least risky, senior tranches.

In our view, efforts to relaunch securitisation of corporate loans in Europe need to be redoubled. The market for corporate loans, particularly to SMEs, presents significant growth opportunities. Moreover, securitisation can help banks offload the risk associated with SME loans, freeing up capital to extend more credit to these businesses. This approach can diversify the investor base, spread risk more broadly across the financial system, and ensure that credit flows to the economy, thereby also enhancing financial stability.

Proposals to revive securitisations should focus on promoting the SME segment of the market. European policymakers have recently discussed various policy measures to revive the securitisation market, recognising its potential to enhance SME access to credit and to contribute to deepening and integrating capital markets. Recommendations by various bodies include:

- The Eurogroup has called for a comprehensive assessment of factors impeding the market, including the adequacy of the regulatory framework and the prudential treatment of securitisations for banks and insurance companies. Additionally, there is a push to streamline reporting and due diligence

requirements to reduce the administrative burden on market participants. [80]

- The European Central Bank has similarly highlighted the necessity of enhancing the securitisation market to support CMU's objectives. In its statement, the European Central Bank emphasised the role of securitisation in transferring risks away from banks, thereby enabling them to extend more financing to the real economy. The European Central Bank advocates further standardisation of securitisation practices and the potential use of public guarantees to boost investor confidence and market liquidity.[81]
- A key proposal within the CMU framework is the establishment of an EU-wide securitisation platform, as highlighted in the Noyer report. This platform would introduce public guarantees for pan-EU issuances and centralise infrastructure to standardise securitisation across the EU, addressing market fragmentation with uniform procedures to enhance transparency and reduce transaction costs. Standardised documentation and processes would foster investor confidence, enabling easier assessment and comparison of products, which could attract a broader range of investors and boost market liquidity. This platform would particularly benefit countries with less developed capital markets by providing easier access to securitisation. Supporting the broader CMU goals, an EU-wide platform would also promote cross-border investments, enabling more efficient trading of securitised products across European markets, thus strengthening financial stability and enhancing the EU's global competitiveness.[82]
- To further align securitisation with EU policy objectives, such guarantees could be structured as conditional finance tools. For instance, a public guarantee supporting SME loan securitisation could require participating banks to direct a portion of new lending toward sustainable initiatives, such as energy-efficient upgrades, digital transformation, or infrastructure investments that strengthen climate adaptation. This approach would not only support the twin transition but also reinforce the public-good rationale for state-backed guarantees, ensuring they contribute to long-term EU economic and environmental resilience.
- Some Member States are sceptical about creating an EU-sponsored securitisation platform backed by public guarantees, viewing it as likely to trigger complex fiscal and state aid discussions that fall outside the current policy scope. Still, there is broad consensus that any reform of the EU securitisation framework should have a clear, well-defined purpose. For instance, some Member States stress the need to align any securitisation overhaul tightly with the broader CMU project, while others focus on ensuring that it facilitates SME funding and fosters a greener, more digital economy.
- While public guarantees could catalyse an EU-wide securitisation platform, particularly in targeting SME loans, they clearly raise important policy questions. If not carefully structured, guarantees risk evolving into a subsidy that distorts competition or triggers state aid complexities. Experiences at national development banks and the European Investment Bank suggest that rigorous eligibility criteria and risk-sharing arrangements can limit these downsides. Such

[80] https://www.consilium.europa.eu/en/press/press-releases/2024/03/11/statement-of-the-eurogroup-in-inclusive-format-on-the-future-of-capital-markets-union/

[81] https://www.ecb.europa.eu/press/pr/date/2024/html/ecb.pr240307~76c2ab2747.en.html

[82] https://www.tresor.economie.gouv.fr/Articles/2024/04/25/developing-european-capital-markets-to-finance-the-future

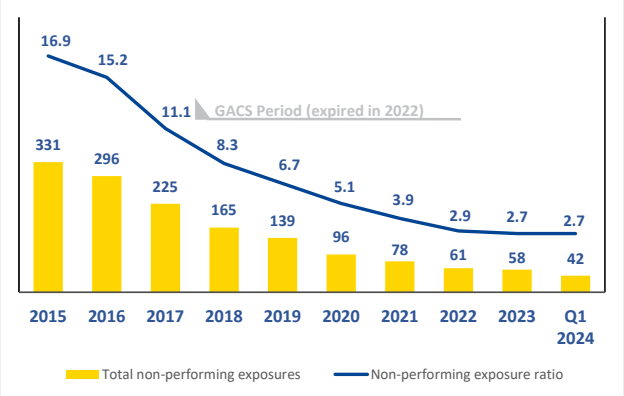
frameworks, when applied on an EU scale, would need to ensure that public guarantees are targeted at well-defined common economic goals (such as supporting SMEs or EU innovation and growth) without unduly burdening taxpayers. By drawing on evidence from national initiatives like Greece's Hellenic Asset Protection Scheme and Italy's Guarantee on Securitisation of Bank Non-Performing Loans (see Box 5), policymakers can design a state-aid compliant EU-level guarantee mechanism that boosts cross-border investment in SME loans, remains fiscally sustainable, and fosters more integrated capital markets in line with the CMU vision.

Box 5: From national to pan-European securitisation

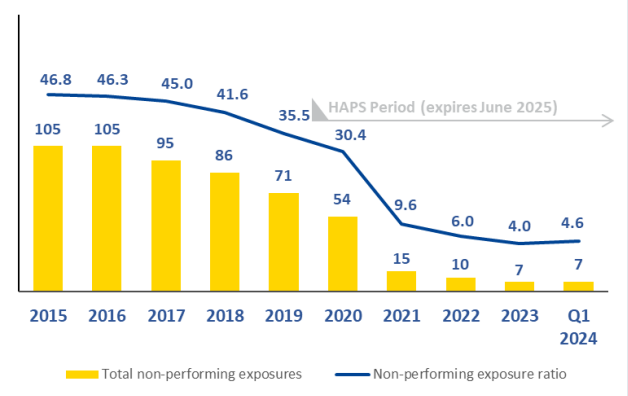
Existing national frameworks, such as Greece's Hellenic Asset Protection Scheme (HAPS) and Italy's *Garanzia sulla Cartolarizzazione delle Sofferenze* (Guarantee on Securitisation of Bank Non-Performing Loans, GACS), offer valuable insights into how government-supported securitisation can be used to effectively manage assets, including distressed assets. These schemes have demonstrated how state-backed guarantees can help banks offload non-performing loans, restoring balance sheets and stimulating further lending Figure 22). The successful application of these schemes suggests that similar approaches could be replicated and scaled up at the EU level to support another targeted segment of assets such as SME loans, aligning with CMU goals of enhancing cross-border investment, supporting SME financing, and strengthening the EU's global competitiveness.

Figure 22
Non-performing loan stock and ratios for Italy and Greece
(stock in € billion, ratios in %)

Italy



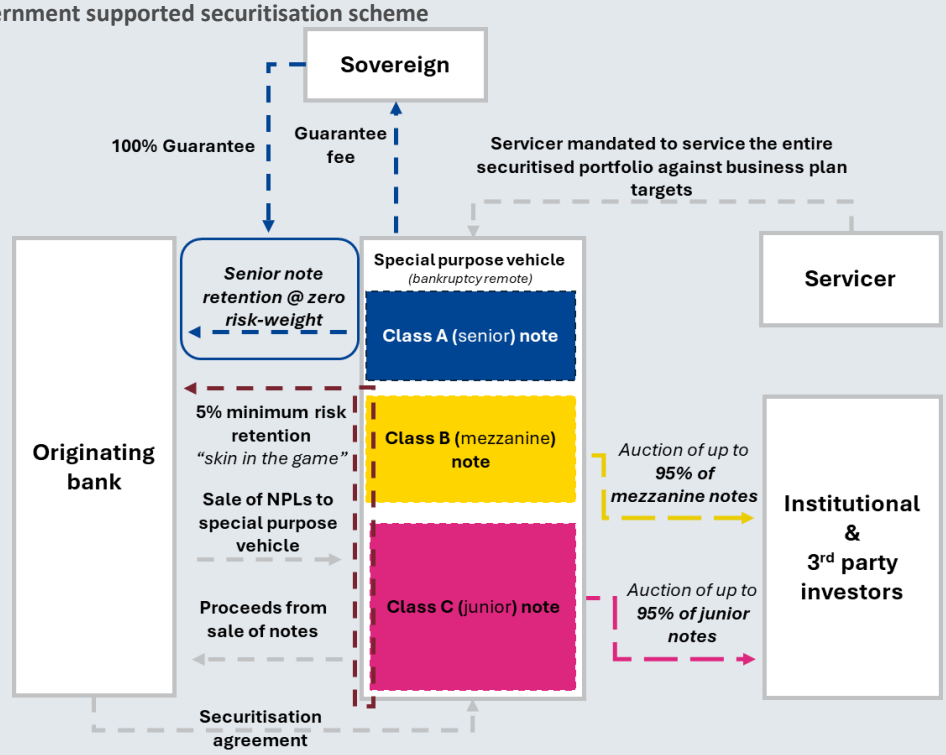
Greece



Source: European Central Bank

Securitising distressed assets has proven to be an effective crisis management tool in the euro area. HAPS and GACS have allowed banks to remove non-performing loans from their balance sheets in a capital-efficient way, restoring liquidity and enhancing stability. By selling non-performing loans to special-purpose vehicles and allowing the originating banks to retain the senior notes at zero risk weight given the sovereign guarantee, these schemes have helped banks to unlock lending capacity. This securitisation process has benefited banks and contributed to the creation of a secondary market for these assets, allowing wider investor participation.

Figure 23
Government supported securitisation scheme



Sources: ESM

A key feature of both HAPS and GACS is their adherence to EU state aid rules, designed to prevent governments from distorting competition for specific segments of the market. These schemes are structured to ensure that government involvement mirrors that of a private investor, with the state being remunerated at market rates for the risks assumed by guaranteeing senior tranches (Figure 23). This compliance has been crucial in preventing market distortions while providing vital support to banks struggling with high non-performing loans levels. Both schemes also require at least 50% of the risk-bearing mezzanine and junior tranches to be sold to private investors before the state guarantees are provided, ensuring that market forces validate the risk distribution of the securitised portfolios. Furthermore, measures were implemented to ensure that the state guarantees were priced at market levels. In the GACS scheme, guarantee fees were linked to a basket of single-name credit default swaps of Italian corporates, aligning pricing with the market's perception of credit risk. Similarly, in the HAPS scheme, guarantee pricing was tied to Greek government credit default swaps, reflecting market assessments of the government's credit risk. These mechanisms ensured that guarantees were provided on commercial terms, avoiding any distortion of competition.

Both schemes received approval from the European Commission, which concluded that these measures did not constitute unfair aid. These stringent safeguards highlight the careful design of both HAPS and GACS, ensuring compliance with EU regulations while

offering crucial support to banks.

While effective, HAPS and GACS face certain limitations; some of these would apply to an EU-backed platform, while others could be mitigated at the supranational level. One of the primary challenges of national schemes is their operational complexity, as they require extensive coordination between national authorities, banks, and EU regulatory bodies on a case-by-case basis. This limitation partially carries over to an EU-wide platform, given the inherent complexity of administering such a large-scale securitisation scheme. An EU platform, however, could mitigate this complexity by standardising and streamlining this process, reducing the administrative burdens that individual countries face in establishing their own platforms.

Another limitation of national schemes is their exposure to sovereign risk, as the guarantees are tied to the creditworthiness of their respective governments. This reliance on individual national fiscal health makes such schemes vulnerable to potential credit rating downgrades on economic instability within those countries, which impacts investor confidence and the schemes overall effectiveness. An EU-backed platform could significantly mitigate this risk by offering a public guarantee supported by the credit rating of an EU public body, rather than any single Member State. This structure would protect the platform from country-specific financial distress, providing a more resilient foundation for securitisation efforts.

An EU-wide securitisation platform for SMEs?

The potential for an EU-wide securitisation platform to specifically target a subsection of European SME loans presents both significant opportunities and challenges. By focusing on supporting the securitisation of SME loans, the platform could provide these businesses with a steady supply of credit, enabling them to invest, grow, and innovate. This approach would lower the risk for banks, making them more willing to extend credit to SMEs, thereby fostering economic growth.

Securitising SME loans however involves higher complexity and risk than more uniform asset classes, such as mortgages. This is primarily due to the diverse nature of SME loans, which vary significantly in size, sector, and credit quality. SMEs often have shorter credit histories and experience more volatile financial performance, complicating risk assessment. Additionally, SME loans tend to be smaller and less homogeneous, which complicates the pooling process for securitisation and increases the cost of structuring the asset-backed securities. Ensuring prudent credit assessment and risk management processes would be crucial to mitigate these risks. Adopting strict underwriting standards and requiring loan diversification, along with maintaining granular loan performance data, would also be critical.

Although these hurdles may appear daunting, they are not deal-breakers. In practice, similar complexities have been effectively mitigated in smaller, national-level guaranteed securitisation schemes involving SME loans, suggesting that they are challenges to be managed rather than roadblocks to progress. Drawing on these experiences, a well-structured framework with robust supervision and data-driven underwriting can ensure that SME securitisation remains both sound and scalable.

Some Member States have suggested establishing an EU-backed approach for mortgage securitisation, similar to those of the federal mortgage agencies in the US, to promote product standardisation across Europe and generate a sizeable pool of safe assets. However, given Europe's well-established covered bond markets and the diverse national character of housing policy, the case for such an initiative is less compelling. For this

reason, this paper deliberately confines its focus to SME finance, where access to market-based funding is less developed and where securitisation could deliver far greater added value in supporting innovation, growth, and cross-border integration**.** By diversifying traditionally bank-held risk onto broader capital markets, SME securitisation can also help strengthen financial stability, a key goal of CMU and the ESM.

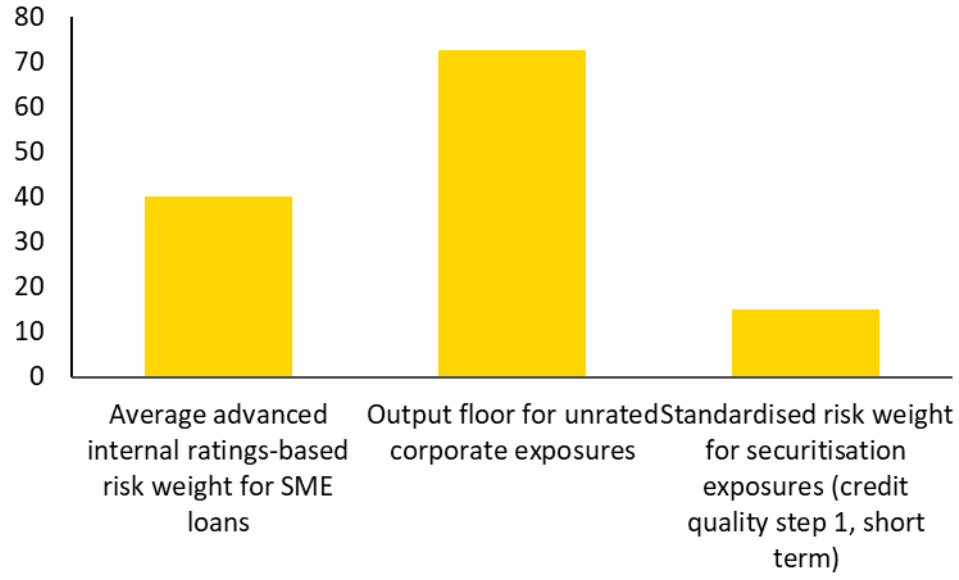
Implementing clear eligibility criteria, in a similar spirit to those for US mortgages, remains feasible for SME loans despite their greater heterogeneity and would help to standardise the market across Member States. Regulatory requirements for banks to retain on their balance sheets a portion of the risk associated with the securitised assets further align incentives to maintain high credit discipline. Though harmonising SME loans is more challenging than standardising mortgages, consistent and centralised data collection, prudent underwriting benchmarks, and transparent reporting, can over time yield securitised portfolios that are both attractive to investors and supportive of Europe's most dynamic businesses.

Synthetic securitisation, with regulatory safeguards, offers further possibilities

Synthetic securitisation could become more attractive for banks, in particular for those with advanced internal ratings-based models for calculating the capital requirement for credit risk. By design, synthetic securitisation provides capital relief but not liquidity relief, as the underlying assets remain on the originator's balance sheet. This contrasts with traditional, or true sale, securitisation, which can serve more broadly as wholesale financing. Synthetic securitisations can be made through either unfunded or funded structures (Figure 25).[83] The business case for such structures is likely to increase with the implementation of the output floors envisaged in the Basel III standards. According to these, the risk-weighted asset density for a bank loan cannot fall below 72.5% of the requirement under the standardised approach. For corporate counterparties without an external credit rating, the standardised risk weight is 100%, whereas the internal ratings-based approach allows banks to calculate the capital requirement based on their internal loss experience, typically resulting in much lower risk weights for high-quality borrowers. The objective of the output floor is to reduce variability in internal ratings-based model outcomes. However, for banks with a history of low credit losses, it will substantially increase the risk-weighted asset density for SME loans, increasing the amount of capital they are required to hold against such loans and potentially pushing them to lend less to SMEs. Synthetic SME securitisation could be a way for banks to lower their capital requirements under the output floor regime, by retaining on their own balance sheets only the risk of senior tranches – those with a strong credit rating and low corresponding risk weight. In fact, the risk weight assigned to securitisation exposures with an external rating corresponding to credit quality step one and maturity up to one year is 15% (Figure 24).

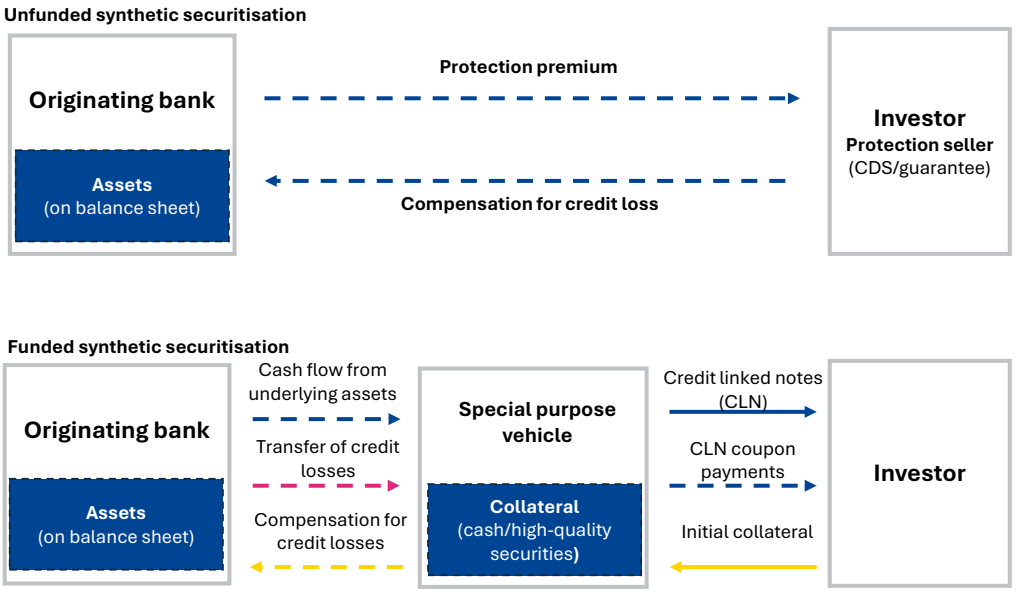
[83] In synthetic securitisation, credit risk is typically transferred via derivatives, such as credit default swaps or total return swaps, while the underlying loans remain on the originator's balance sheet. The distinction between funded and unfunded synthetic transactions hinges on whether the protection seller posts collateral (e.g. into a reserve account). A funded deal involves the investor depositing collateral to cover potential credit losses, whereas an unfunded deal provides credit protection through credit default swaps or guarantee without upfront collateral.

Figure 24
Comparison of average risk weight density for SME loans under current advanced internal ratings-based approach, the output floor for unrated exposures and the risk weight for rated securitisation exposures in the banking book
(in %)



Note: The average advanced internal ratings-based average risk weight density for SME exposures has been imputed based on data from the 2021 European Banking Authority transparency exercise based on EU-wide data.
Sources: European Banking Authority and ESM calculations

Figure 25
Typical on-balance sheet synthetic securitisation structures



Source: ESM

Achieving significant risk transfer in securitisation, either via synthetic or off-balance sheet transactions, is essential for euro area banks to obtain regulatory capital relief. Securitisation has carried a stigma due to historical concerns about agency risk – where the originating bank's incentives may not align with those of investors. However, recent regulatory advances have enhanced its safety and reliability as a structured finance

product. In synthetic securitisation, where assets remain on the balance sheet, regulatory safeguards, including mezzanine and first loss tests, verify that a significant portion of risk is genuinely transferred (Figure 25). For off-balance sheet securitisations, significant risk transfer requires the legal and effective transfer of assets to a special purpose vehicle, meeting strict derecognition requirements to ensure that the originating bank relinquishes control of these assets. Through the harmonised standards of the European Banking Authority, regulatory scrutiny has come a long way, refining significant risk transfer assessments to confirm that risk transfers are both genuine and proportional to the capital relief sought. These regulatory improvements have transformed securitisation into a more transparent and secure mechanism, allowing banks to achieve capital efficiency while also supporting broader market stability.

Policy considerations

Policy considerations for European authorities:

(xv) **Ensuring access to quality credit data.** Reliable credit data on SMEs is necessary for accurately assessing risk in securitisation. While national level standardisation is a valuable first step, centralising relevant data at the European level would further improve cross-border comparability and investor confidence. The European Single Access Point is a commendable initiative in this regard, as it aims at centralising data access and enhancing transparency. In implementing these frameworks, however, it is essential to avoid overburdening SMEs. Streamlined reporting requirements and coordination with national authorities can help ensure that SMEs do not face disproportionate compliance costs, while still providing the market with the quality data needed to accurately price and manage securitisation risk.

(xvi) **Enhancing transparency and standardisation.** Investor confidence is critical to expanding the securitisation market, especially regarding SME loans. Establishing high-quality, standardised disclosure requirements for SME loan securitisation would enable investors to assess risk more accurately and consistently. As argued in Chapter 4, harmonisation of European insolvency law could also help to achieve more predictable insolvency outcomes, and thus enhance investor confidence, while a simplified process for withholding tax dividends would remove barriers to invest across borders. Enhanced transparency and standardisation would attract a broader range of investors, improving liquidity and stability in the securitisation market.

(xvii) **Exploring a pan-EU infrastructure to support SME securitisation.** A pan-EU securitisation platform would reduce operational barriers and promote cross-border investment in SME loans. Centralising processes at the European level and incorporating features such as a high-rated public guarantee for certain tranches would increase investor confidence, lower transaction costs, and make securitisation a more accessible funding tool. To align with broader EU policy goals, such guarantees could also be structured as conditional finance tools, encouraging lending towards sustainability-linked investments or digital transformation. Such infrastructure would also contribute to deeper market integration and provide a more efficient framework for managing SME credit risk across the EU.

Concluding thoughts

The debate on how to advance the CMU agenda is rich and ambitious yet progress has been relatively slow. Although important objectives have been achieved — especially regarding the partial harmonisation of European financial systems and regulations — in other areas, such as cross-border retail investments or insolvency regimes, progress has been more elusive. In this paper we have identified some aspects where policy efforts are needed to regain momentum in the CMU project.

Rather than casting the net wide, our strategy has been to focus on a reduced number of critical issues that are stalling the advancement of CMU. This sharper aim has helped pinpoint specific impediments and articulate more detailed policy considerations. Specifically, we have homed in on four priorities:

(i) encouraging households to adopt a longer-term perspective in allocating their savings, in line with Europe's growth and innovation needs;

(ii) expanding the social reach of CMU to a broader income segment of the population;

(iii) Increasing the share of funded pensions, to unleash additional long-term capital for investments, through pension system reform and mandating or strengthening incentives for contributions to funded retirement plans; and

(iv) concentrating the efforts to relaunch securitisation markets on corporate and SME loans, potentially via the establishment of an EU-wide securitisation platform assets backed by public guarantees.

Our policy considerations fit well within the broader CMU agenda, making it a savings and investments union for people and firms. The measures we propose reflect key issues already supported by national and EU authorities. Rather than introducing isolated new goals, they offer articulated proposals grounded in deep analysis and evidence from national best practices.

Table 2
Summary of policy considerations

Area	Goal	Authorities	Chapter
1. Tax-advantaged savings and investment accounts.	Foster greater retail participation in non-bank financial markets.	National level; EU coordinated	2
2. Tax rewards towards middle-and lower-income groups.	Increase financial market participation of poorer segments of the population; expand social reach of CMU.	National level	2
3. Education initiatives to improve financial literacy.	Enable households to make better investment decisions, thus fostering greater retail participation.	National level	2
4. Regulation and supervision of investor protection to reduce the risk of households being exposed to investment fraud.	Foster greater retail participation in non-bank financial markets.	National level	2
5. Macroprudential policies for non-bank financial intermediation.	Mitigate systemic risks; balance integration and financial stability goals	European level	
6. Retirement income cap from public PAYG pension schemes.	Safeguard sustainability of public pension systems and increase incentives for greater long-term risk-taking at retail level.	National level	3
7. Incentives for funded retirement savings.		National level	3
8. Investment guarantee limits.		National level	3

9. Active asset management of public and private pension funds.	Diversify pension fund assets and allow greater risk-taking	National level	3
10. Performance transparency together with greater investment flexibility of pension funds .	Ensure investor protection and trust, thus securing broad-based participation	Pension funds under national authorities' auspices	3
11. Pan-European pension funds.	Reduce home bias in the fund industry	EU level	3
12. Risk-based capital requirement for occupational pension funds subject to IORP regulation.	Balance capital market integration with financial stability objectives	National level	3
13. Quick implementation of the FASTER directive.	Significantly reduce dis-incentives for cross-border retail investments (e.g. in mutual funds and equities).	National level; EU coordinated	4
14. Harmonisation of national insolvency frameworks.	Reduce dis-incentives for cross-border investments.	National authorities under EU auspices	4
15. Securitisation markets on SME/corporate loans segment.	Increase bank lending available to SMEs/corporations while broadening the cross-border investor base	National authorities under EU auspices	5

Source: ESM

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