
Ten guiding principles to help cover the EU's investment needs

Judith Arnal | Senior Research Fellow, Elcano Royal Institute | @judith_arnal 

Theme¹

This paper proposes 10 principles to facilitate covering the EU's additional investment needs for the coming years.

Summary

The EU has been in the midst of a [polycrisis situation](#) since 2008. Additional investment needs in the EU for the coming years could be above €700 billion annually. Nevertheless, there are a number of challenges the EU will be facing in the coming years to meet these needs. Against such a background, this paper proposes 10 principles to facilitate covering the EU's additional investment needs for the coming years. These principles are mainly related to simple administrative procedures to free up public funds, a full and efficient use of both available public and private funds, coordination among Member States, prioritisation of investment needs, a pro-investment regulatory environment, with ambition in key regulatory reforms underpinned by efficient technical and political negotiations, and increased trust in strategic partners, and avoidance of unwarranted protectionist measures.

Analysis

(1) Introduction

The EU has been in the midst of a polycrisis situation since 2008: the Global Financial Crisis was followed by the sovereign debt crisis; in 2016, [the UK decided to leave the EU](#); once the financial and political situation of Member States and the EU seemed to be returning to normal, [the COVID-19 crisis burst out](#), with major disruptions in global value chains; as the health situation improved, [Russia's war of aggression against Ukraine](#) led to an unprecedented increase in energy prices, which resulted in an inflationary shock; finally, the world is becoming geopolitically fragmented, WTO rules are not respected and global economic players like China have accumulated severe economic imbalances. In this context, the EU needs to reinforce its position in the green, digital and defence fields, while at the same time providing support to strategic allies such as Ukraine.

Additional investment needs in the EU for the coming years could total over €700 billion annually. Nevertheless, there are a number of challenges the EU will face in the coming

¹ The author would like to thank, in alphabetical order, Fernando Álvarez-Cienfuegos (European Commission), María del Carmen Aranda (University of Navarra), [Enrique Feás](#), [Raquel Jorge](#), [Miguel Otero](#), [Federico Steinberg](#) and [Jorge Tamames](#) (all from the Elcano Royal Institute) for helpful contributions to this analysis.

years to meet these investment needs: longer-term drivers of fiscal pressure in the EU have considerably worsened; total debt of both public and private sectors in the euro area stood at 253.7% of GDP in the first quarter of 2023, an increase of almost 51 pp with respect to 2000; financing costs for sovereigns, corporates and households have radically soared; population will substantially age, leading to a relevant decrease in working-age people, and with productivity growth unlikely to offset this trend, public revenues stemming from labour will most likely diminish.

Against this background, 10 principles are proposed in this analysis to facilitate covering the EU's additional investment needs for the coming years. These principles are mainly related to simple administrative procedures to free up public funds, a full and efficient use of both available public and private funds, coordination among Member States, prioritisation of investment needs, a pro-investment regulatory environment, with ambition in key regulatory reforms underpinned by efficient technical and political negotiations, and increased trust in strategic partners, and avoidance of unwarranted protectionist measures.

(2) The EU's additional investment needs in the coming years could be close to €1 trillion annually

According to calculations presented by the European Commission for the recovery in 2020, additional investments of over €470 billion annually would be needed during the next decade for the green transition. Nevertheless, investment needs estimates for the green transition increased later on due to the Russian invasion of Ukraine: Repower EU investment needs were computed at €210 billion between 2023 and 2027 and Net Zero Industry Act's needs at €92 billion over the period 2023-30 in total. Based on these figures, additional annual EU investment needs related to the green transition for the next few years would be close to €550 billion. When it comes to digital transformation, investment needs would amount annually to €125 billion, according to the aforementioned analysis by Commission services for the recovery. More details on the composition of investment gaps for the twin transitions are shown in Figure 1.

However, in the face of an increasingly geopolitically fragmented world, the EU needs to go beyond the fulfilment of the twin transitions and focus on other relevant matters, such as defence or aid to its allies. In this regard, the reconstruction of Ukraine will require from all parties involved €349 billion over the coming decade. Moreover, according to European Defence Agency data, spending in defence by Member States is set to grow by up to €70 billion by 2025. All in all, additional investment needs in the EU for the coming years could be above €700 billion annually.

Figure 1. Identified EU investment gaps for the twin transitions

Green transition investment gaps (in € bn)	€ bn
(1) Additional green investments for the recovery (yearly between 2021-30)	
Renewable energy	30
Construction	185
Industrial/other energy efficiency	5
Transport	120
Environmental protection	77
Resource management	38
Circular economy (beyond needs already included)	15
Total additional yearly green investments for the recovery	470
(2) Repower EU (total between 2023 and 2027)	
Increase biomethane production	37
Energy efficiency and heat pumps	56
Adapting industry to use less fossil fuels	41
Renewables and key hydrogen infrastructure	113
Security of oil supply	2
Investments to import sufficient LNG and pipeline gas	10
Power grid to enable greater electricity use	29
Total additional green investments for Repower EU between 2023 and 2027	210 (the amounts listed above add up to 288, but 78 billion overlap with additional investment needs for the recovery)
(3) Net Zero Industry Act (total between 2023 and 2030)	
Net Zero Industry Act-total additional green investments between 2023 and 2030	92

Digital transformation yearly investment gaps (in € bn)

Communication networks	42
HPC, Graphene and Quantum	6
Cloud	11
AI and Blockchain	23
Digital green technologies	6
Cybersecurity	3
Digital innovations/Data and Next Generation Internet	5
Semiconductor/Photonics	17
Digital skills	9
Common European data spaces	3
Total additional yearly digital investments for the recovery	125
TOTAL	595 yearly between 2021 and 2030; 210 in total between 2023 and 2027; 92 in total between 2023 and 2030

Source: the author, based on European Commission calculations.

(3) There are a number of challenges the EU will face in the coming years to meet these investment needs

First, investment needs should be covered by both public and private sectors. Nevertheless, starting with the public sector, as shown in Figure 2, [from a Bruegel analysis](#), longer-term drivers of fiscal pressure in the EU between October 2019 and April 2023 have considerably worsened: the median of the distribution of debt to GDP levels in the EU is 10 points higher; differences between high- and low-debt countries have aggravated, as debt to GDP for 25th percentile of the distribution is expected to be less than 6 points higher, compared with more than 14 points for the 75th percentile; long-term real interest rates have increased by more than 2 points; and the expected debt stabilising primary balance has risen by 0.8 points for low-debt countries and by 1.2 points for high-debt countries. On the positive side, expected real GDP growth rates are still above long-term real interest rates, which is key to ensuring debt sustainability.

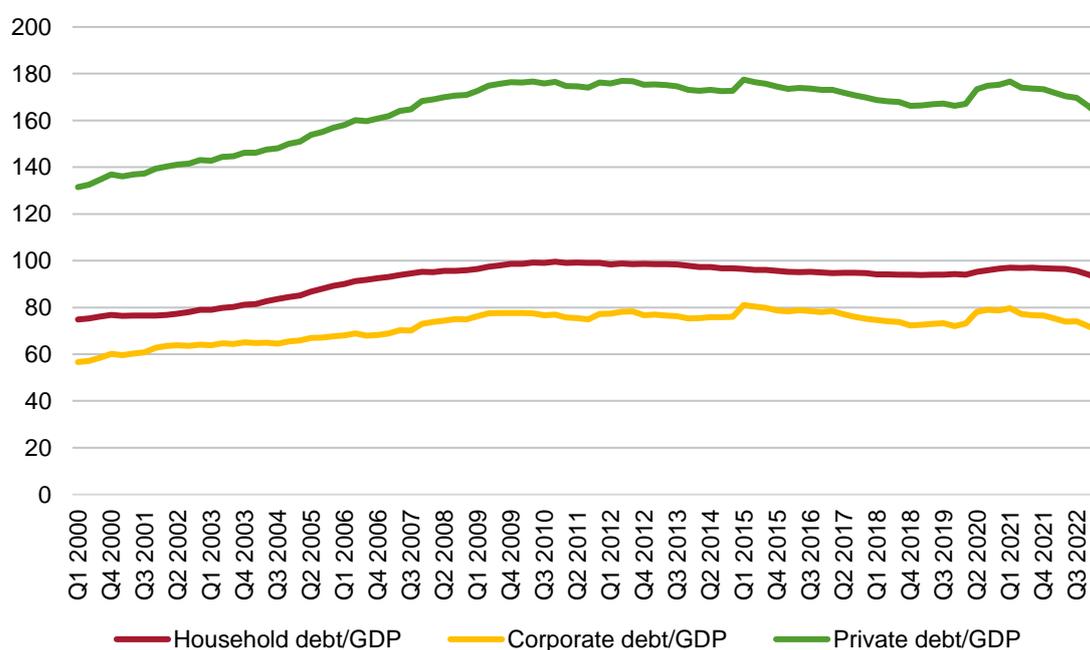
Figure 2. Longer-term drivers of fiscal pressure in the EU: comparison between 2019 and 2023

	Debt to GDP expected in 5 years			Real growth expected in 5 years (%)			Expected long term real interest rates (%)			Expected debt stabilising primary balance (% of GDP)		
	2019	2023	Diff.	2019	2023	Diff.	2019	2023	Diff.	2019	2023	Diff.
75 th pc	78.5	92.9	14.4	2.6	3	0.4	-0.3	1.9	2.2	-1.1	0.1	1.2
Median	47.3	57.5	10.2	2.1	2.3	0.2	-0.8	1	1.8	-1.4	-0.6	0.8
25 th pc	30	35.6	5.6	1.5	1.5	0	-1.3	0.4	1.7	-1.6	-0.8	0.8

Source: Bruegel.

As for the private sector, in the first quarter of 2023 debt to GDP stood at 162.5% in the euro area, with corporate debt to GDP at 70.2% and household debt to GDP at 92.3%. Figure 3 shows the evolution of private-sector debt between the first quarters of 2000 and 2023, during which an increase of 31 pp took place.

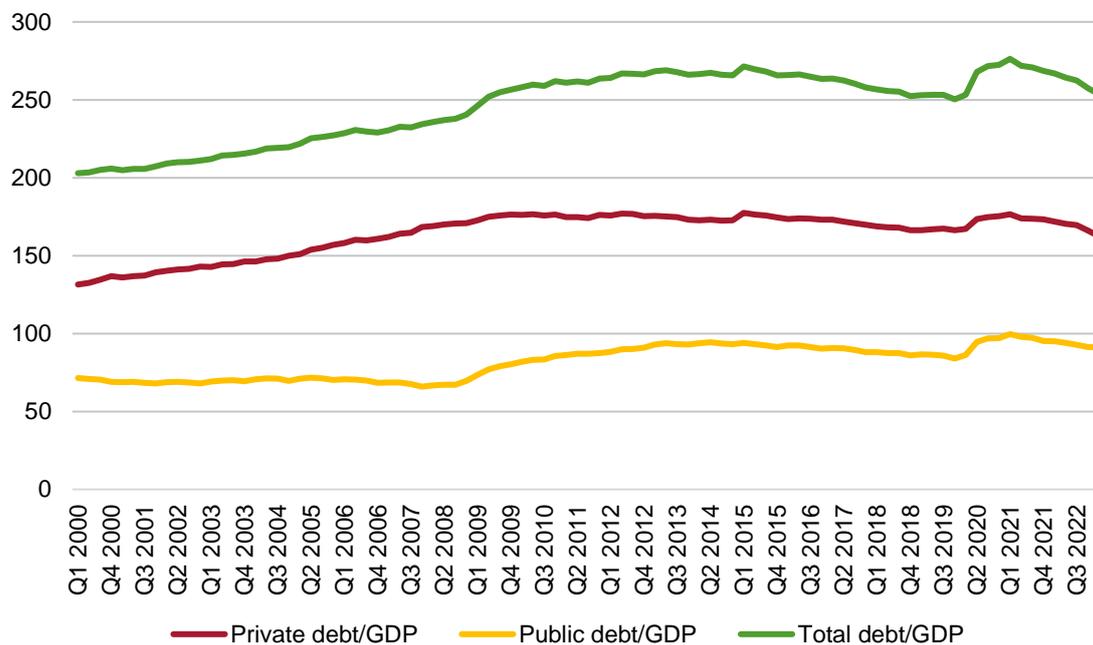
Figure 3. Evolution of private debt to GDP in the euro area, 2000-23 (quarterly data between 1Q00 and 1Q23)



Source: the author, based on European Central Bank data.

Total debt of both public and private sectors stood at 253.7% of GDP in the first quarter of 2023, an increase of almost 51 pp with respect to 2000, of which more than 60% was attributed to an increase in private debt.

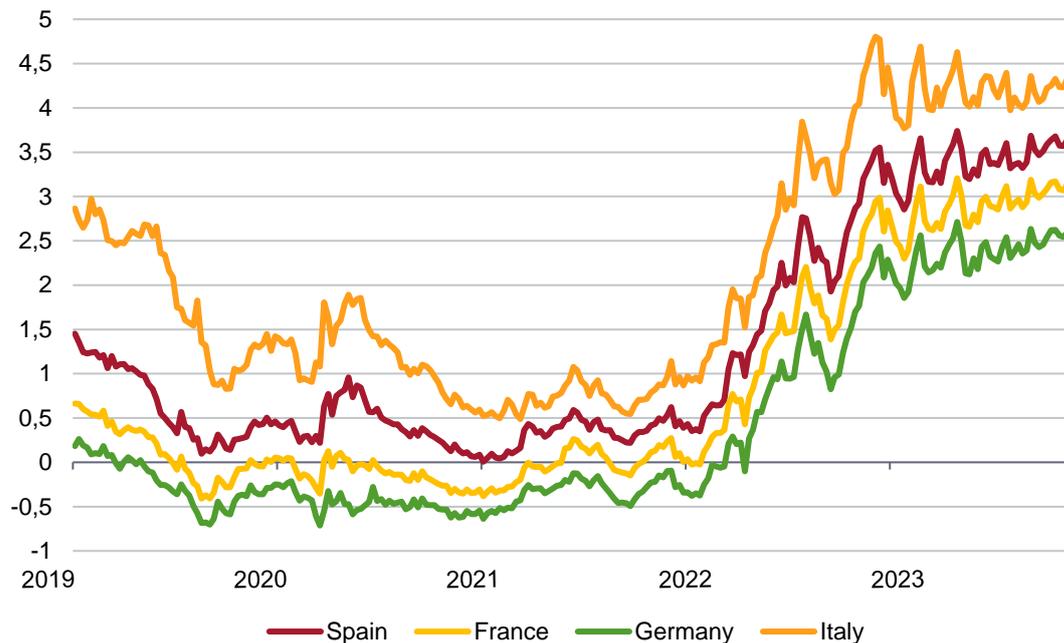
Figure 4. Evolution of total debt to GDP in the euro area, 2000-23 (quarterly data between 1Q00 and 1Q23)



Source: the author, based on the European Central Bank.

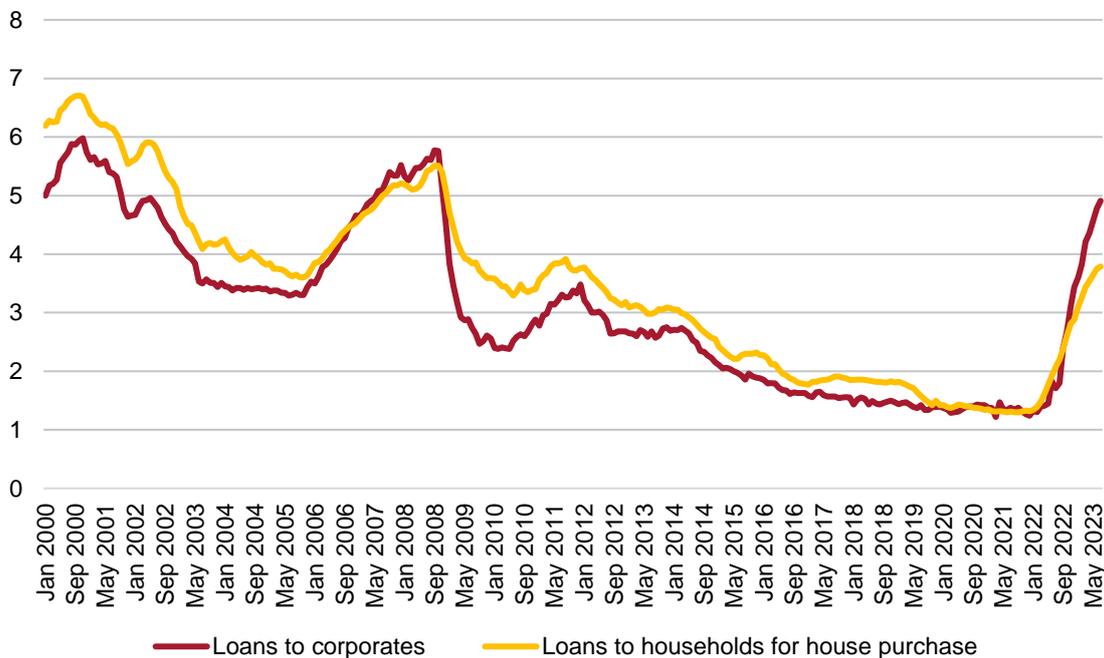
Apart from the increase during the past two decades in the stock of total debt in the euro area, financing costs for sovereigns, corporates and households have also radically soared against the background of a restrictive monetary policy stance that is set to remain **at sufficiently restrictive levels for as long as necessary** (see Figures 5 and 6).

Figure 5. 10-year sovereign bond yields, 2019-23



Source: the author, based on Investing.com.

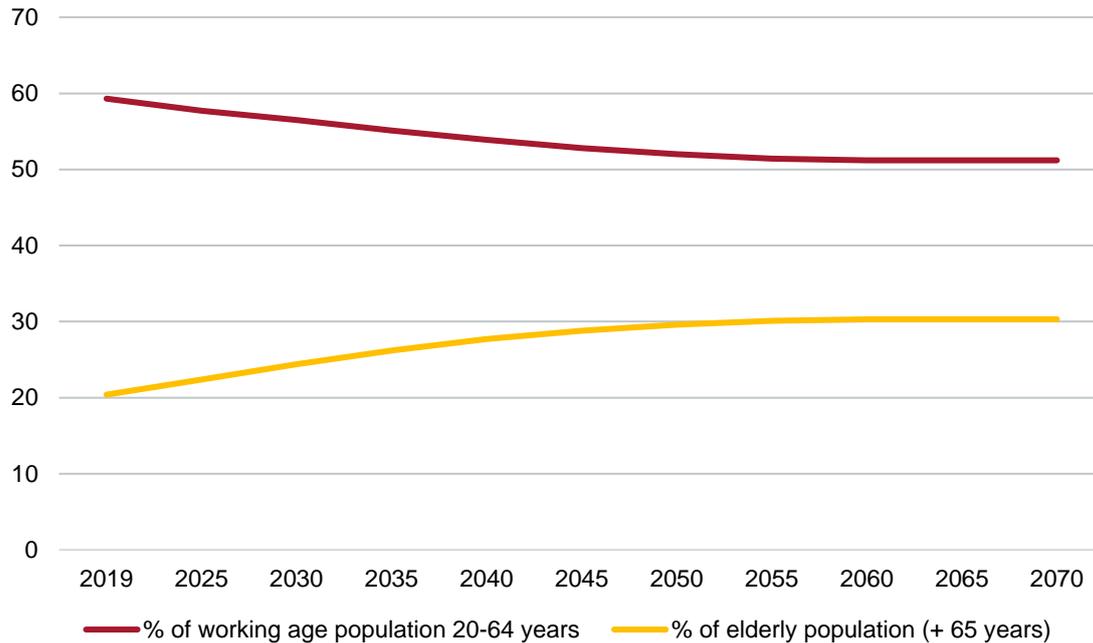
Figure 6. Bank interest rates: corporate and household, 2000-22



Source: the author, based on the European Central Bank.

As shown in Figure 7, population will substantially age, with an expected decrease of 8 pp of working-age population between 2019 and 2070. With productivity growth unlikely to offset this trend, public revenues stemming from labour will most likely diminish.

Figure 7. Expected evolution of working and elderly populations, 2020-70



Source: the author, based on the European Commission.

(4) Ten guiding principles to help cover EU investment needs

Given the high investment needs and challenges mentioned under sections 2 and 3, current practices by the EU and Member States need to change in some areas. As explained below, these refer to administrative procedures, institutional architecture, prioritisation of investment needs and reforms, and a correct identification of potential allies.

(4.1) Principle 1: simplicity in the design and access to public funds

Though comparing available public funds in the US and the EU is not straightforward due to divergences in time horizons and instruments, rough estimates point to similarly available funds when it comes to green subsidies, for example. Figure 8 shows the funds allocated to the Green Industrial Plan, which amount to €335 billion, to which funds from Member States should be added. This amount should not differ much from the €370 billion for security and climate change programmes under the US Inflation Reduction Act (IRA).

Figure 8. Funds of the Green Deal Industrial Plan

Instrument	Origin and budgetary revenue	Quantity (US\$ bn)
RePowerEU	EU funds (from the EU Emissions Trading System)	20
Brexit Adjustment Reserve	EU budget (MFF 21-27)	5.4
Loans under the Recovery and Resilience Facility	Loans from the Commission to Member States (MFF 21-27)	225
Cohesion Funds transferable to other purposes	EU budget (MFF 21-27)	17.9
InvestEU	Guarantees of the EU budget (MFF 21-27)	26.2
Innovation Fund	EU funds (from the EU Emissions Trading System)	40
TOTAL		334.5

Source: CaixaBank Research.

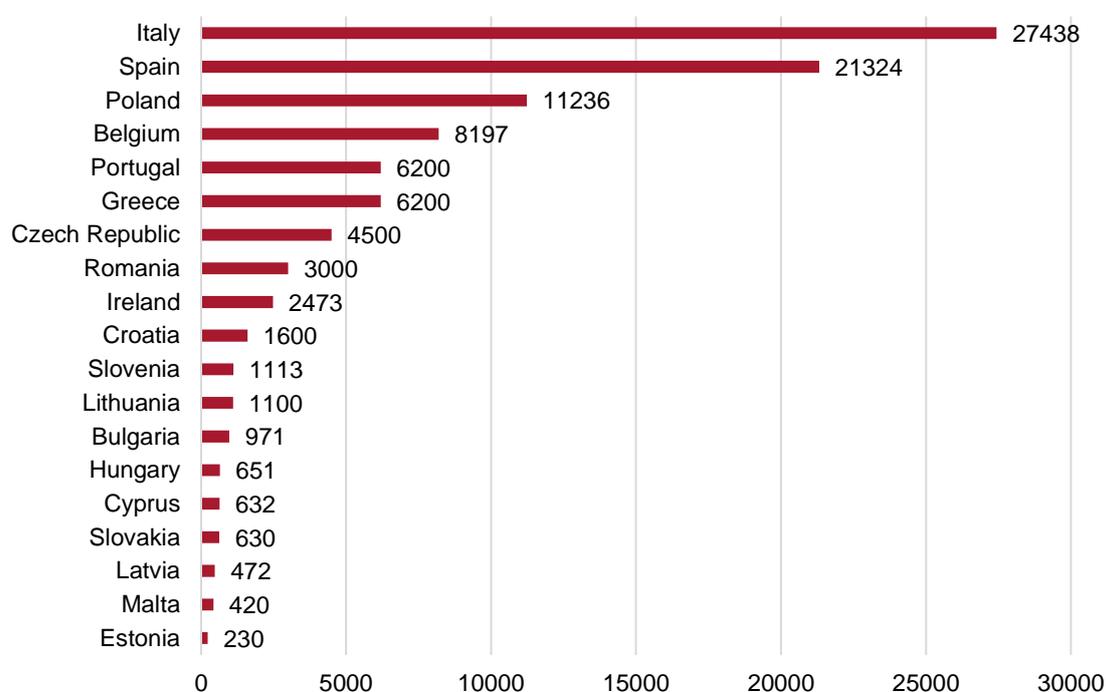
The main difference in this regard pertains to less bureaucracy in the US and simplicity in the channelling of funds, with tax credits being the main tool. In the EU, support programmes are based on prolonged application procedures to which specific projects need to be presented with different levels of administrations (EU, national and regional) being involved depending on the specific area of competence. In contrast, in the US, public support is available upfront and is concentrated at the federal level. Thus, EU, national and regional authorities should make an effort to cut red tape and use more straightforward instruments, such as tax credits. Yet, with at least 27 different tax systems in the EU, a tax credit based system may prove more challenging to implement than in the US. This is why further harmonising corporate taxes in the EU and making meaningful progress on proposals such as [BEFIT](#) is urgent.

(4.2) Principle 2: full usage of available public funds

The European Stability Mechanism (ESM) played a crucial role during the sovereign debt crisis in the euro area. Nevertheless, at present, in spite of a highly qualified staff, its role is marginal for the functioning of the EU and the euro area, having been in hibernation for several years. Even during the pandemic, the especially launched [ESM Pandemic Crisis Support Mechanism](#), designed to support ESM Members in the financing of healthcare costs related to the COVID-19 crisis with concessional loans, was not touched upon by any Member State. This is in stark contrast with the [European instrument for temporary Support to mitigate Unemployment Risks in an Emergency \(SURE\)](#), which equally offered Member States concessional loans, in this case to address sudden increases in public expenditure for the preservation of employment. Out of the €100 billion made available under SURE, more than €98 billion have been disbursed, as shown in Figure 9. A possible explanation for this different appetite by Member States for apparently similar facilities could be related to the perceived stigma of tapping on

ESM funds, which to many bring back memories of the worst times of the euro area sovereign debt crisis.

Figure 9. Disbursements under SURE by Member State (€ bn)



Source: the author, based on the European Commission.

Still, the ESM has more than €80 billion of paid-in capital by Member States and a remaining lending capacity above €400 billion. While the ESM was originally conceived to safeguard the financial stability of the euro area by providing loans to Member States against conditionality, the stigma effect the institution seems to be suffering puts into question its workability under the current terms. Moreover, the experience of a more negotiated approach under National Recovery Plans of Next Generation EU, where Member States themselves suggest the adequate reforms and investments to be later approved by the Commission and the EU Council, also testifies for a change in paradigm. Ownership is the new norm and has replaced Memoranda of Understanding. Finally, the intergovernmental nature of the ESM complicates unnecessarily decision-making processes and introduces an unwarranted layer of complexity in the institutional architecture of the EU.

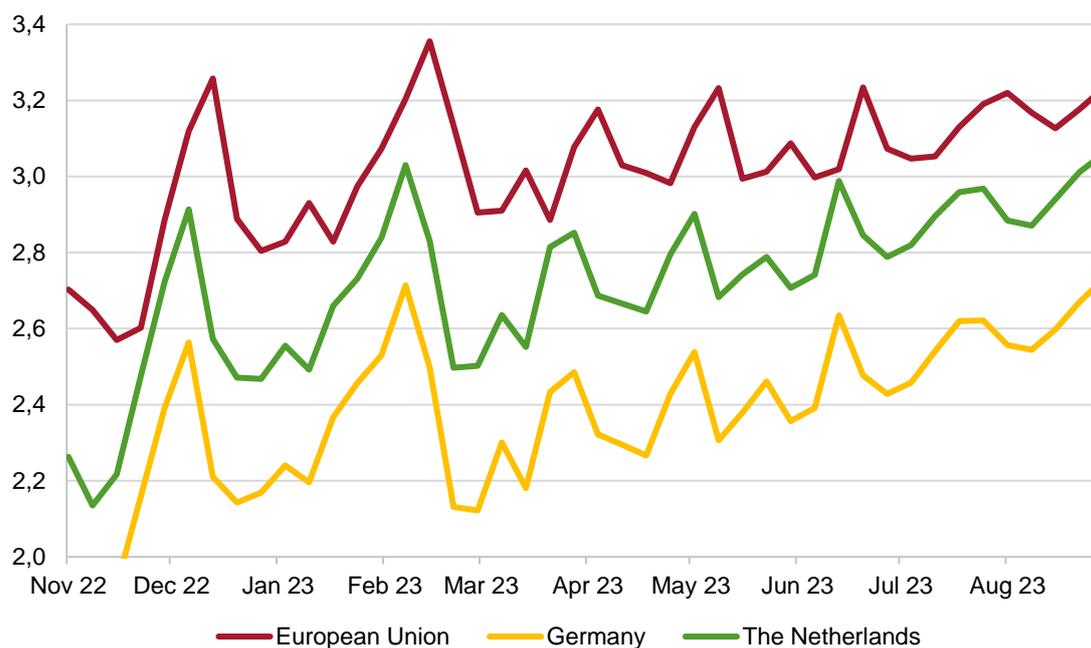
Therefore, a reform of the ESM is warranted, both to incorporate it into the EU institutional framework and to ensure an adequate use of its available firepower. For the latter, the ESM could be the provider of a permanent central fiscal capacity with a borrowing function which could comply with **three main functions**: macroeconomic stabilisation; support of public investment at the national level; and enabling investment in EU common public goods, such as investments in the green and digital transition. Introducing a central fiscal capacity that would meet all these three functions would certainly be challenging from a political point of view. Thus, at the bare minimum, the central fiscal capacity should finance EU common public goods. In the context of the

deactivation of the general escape clause, Member States will need to meet renewed fiscal rules. Nevertheless, even if an agreement on a new set of fiscal rules is achieved, [combining fiscal sustainability and investments](#) will certainly be difficult in the absence of a central fiscal capacity, with all fiscal effort being borne by Member States.

But apart from the ESM, the EU risks not making full use of available funds under Next Generation EU. According to the [second annual report on the implementation of the Recovery and Resilience Facility \(RRF\)](#), the European Commission has disbursed €153.4 billion, which is less than 20% of the €800 billion available under the facility. Moreover, disbursements by the Commission do not necessarily match investments by Member States, as administrative procedures may take time, especially depending on the administrative structure of each country. It seems challenging for Member States to be able to fully absorb the available funds under Next Generation EU by 2026. Therefore, an extension of the implementation period beyond 2026 would be highly advisable.

(4.3) Principle 3: efficiency in raising public funds

The European Commission, on behalf of the EU, has become a major issuer in financial markets. Although it benefits from an AAA rating, its cost of funding is well above other AAA rated sovereign issuers in the euro area, such as Germany and the Netherlands, as shown in Figure 10. This is due to a [number of reasons](#) such as lower liquidity, more penalising treatment by financial institutions in internal risk models, exclusion from sovereign bond indices, lack of futures and massive reliance on syndications rather than auctions. But many of these reasons seem to be linked to the fact that Next Generation EU, which generates the bulk of the financing needs of the EU, is a temporary facility and thus markets discount that it will significantly decrease its issuance volumes at a certain point in time. In light of this, the European Commission should do everything within its reach to revert some of the reasons for higher yields (eg, relying more on auctions), but Member States should also consider the opportunity of creating a permanent issuer that could benefit from having an AAA rating. In this respect, having competing issuers in markets (ESM and European Commission) does not seem to be efficient. Therefore, unifying fund raising under the same issuer (ie, building a European Treasury), that would issue a common European safe asset, would most likely increase efficiency in the usage of public funds. Moreover, if a central fiscal capacity was to be introduced, as suggested under principle 2, market presence would be guaranteed and would significantly reduce markets' views of possible liquidity issues.

Figure 10. 10-year bond yields, December 2022-September 2023

Source: the author, based on Eikon and Investing.com.

(4.4) Principle 4: efficiency in channelling private funds

As pointed out in section (2), funding needs for the green transition will be the highest ones. When it comes to funding green investments, regulators express high hopes as regards capital markets. Even the term ‘[Green Capital Markets Union](#)’ has been labelled, encompassing several regulatory initiatives, such as taxonomy, disclosure, transition benchmarks, rules for ESG rating providers and Green Bond Standards. Nevertheless, much less attention is focused comparatively on the greening of the banking sector. This is surprising for the EU, since [bank loans account for 75%](#) of corporate borrowing in the EU and bond markets for 25%, while the reverse is true in the US.

While transparency obligations are positive and can contribute to fostering green funding, they do not seem to be up to the task of meeting the gigantic funds needed for the green transition. Indeed, [mere transparency obligations are unlikely](#) to have a relevant impact on investors’ decisions. [The world’s 60 largest banks are exposed](#) to around US\$1.35 trillion in risky fossil-fuel assets and in its 2022 climate risk stress test, the Single Supervisory Mechanism (SSM) found that most banks do not have robust climate risk stress-testing frameworks and lack relevant data. Therefore, more intrusive measures should be devised to really promote a re-channelling of funds from brown to green activities.

[Some experts](#) and policy-makers have raised the possibility of introducing Pillar 1 measures. [An analysis](#) shows that applying a 150% risk weight to banks’ exposures to existing fossil-fuel assets would require total additional capital equivalent to around three to five months of those banks’ profits. Should phase-in provisions be included, banks would have longer to respond.

Even if according to these analyses the introduction of Pillar 1 measures would be financially feasible for banks, it would probably be more prudent to follow a staggered approach and start by testing Pillar 2 measures, which can be immediately applied without the need for lengthy regulatory changes and discussions.² Indeed, supervisors have the power to curtail or incentivise banks into lending activities to risky carbon-intensive projects. In this regard, introducing incentives under Pillar 2 Requirements would probably be welcome by banks. Nevertheless, in order for Pillar 2 measures to work properly and avoid the potential introduction of a Pillar 1 reform, coordination is of the utmost relevance. First, though the SSM ensures a harmonised approach for banks of Member States participating in the Banking Union, there is the possibility that EU supervisory authorities outside this sphere may have a different approach. Secondly, climate stress tests by the ECB showed that small domestic retail lenders (ie, Less Significant Institutions outside the scope of direct supervision by the SSM) are the most reliant on income from greenhouse gas emitting sectors. Thus, all this calls for adequate coordination between the SSM and national supervisory authorities, in order to ensure a proper and harmonised approach in dealing with carbon exposure.

(4.5) Principle 5: coordination among Member States

There are critical areas for the future of the EU where the role of Member States plays a particularly crucial role. An example is the European semiconductor policy. There is neither a big central budget allocated by the EU (except €3 million for the Chip Research Joint Undertaking) nor control of all the projects by the European Commission (except the needed approval within the state-aid framework). Therefore, despite the fact that EU facilities such as the Recovery and Resilience Facility also provide funding for semiconductors, national pledges of grants and public investments by Member States are central to the development of this policy. This situation risks creating an unlevel playing field situation among Member States, as obviously, those countries with higher fiscal space will be able to offer more public funds and thus attract more private investment. But not only does this situation risk damaging highly indebted EU Member States, it is mainly inefficient and dangerous for the whole bloc and for all of its countries. In light of the current situation in the semiconductor industry,³ it is not sensible for any EU Member State to aspire to have on its own territory the whole semiconductor value chain. Pretending otherwise creates the risk for the EU not being able to concentrate the complete value chain along different Member States. In turn, the European Commission should run a deep analysis of the chip value chain in the EU and come up with a proposal to divide the different parts of the chain among Member States, based on their initial competitive advantages. Common EU funding should be provided for this purpose.

² Pillar 1 measures encompass, amongst others, capital requirements embedded in regulations and are to be applied by all banks, irrespective of their risk profile. Pillar 2 measures could lead to the request of additional capital requirements by the supervisor, on the basis of their analysis of the bank's risk profile.

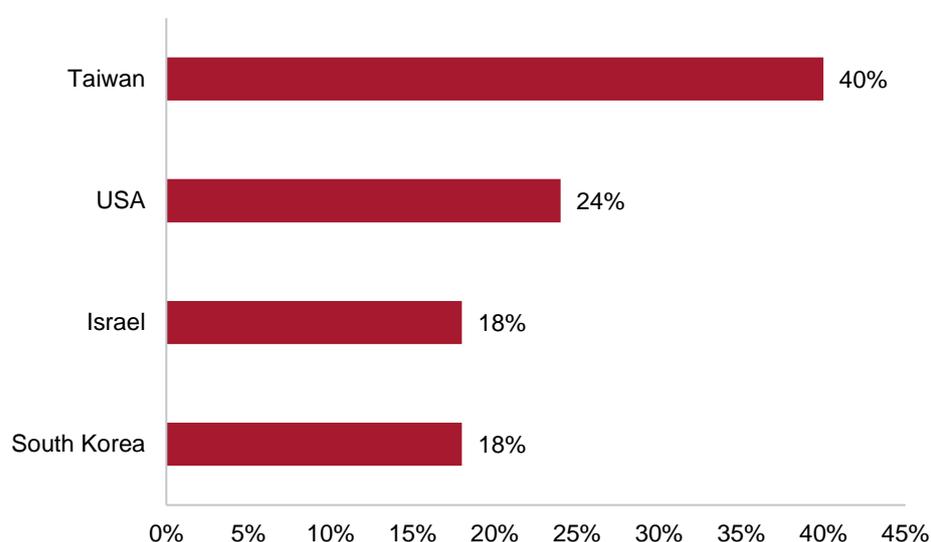
³ There are a few relevant players in the EU in the semiconductor value chain (eg, the Imec research institute in Belgium or ASML in the Netherlands for extreme ultraviolet lithography machines). In spite of these relevant players, the share of the EU in chip manufacturing has steadily declined over the past few decades. Indeed, according to the consulting firm Kearney, it has dropped from 25% in 2000 to 8% in 2022.

(4.6) Principle 6: prioritisation of investment needs

Investment needs as identified by European Commission services in several working documents are very large. However, not all of them are equally important. This calls for a prioritisation of investment needs, with initial efforts being focused on the most pressing ones.

As an example, the EU is not home to any leading-edge production facility,⁴ with only Intel's plant in Leixlip (Ireland) and STMicroelectronics in Crolles (France) producing the 14nm node. Moreover, as shown in Figure 11, the concentration of edge technology chips is especially notable in Taiwan and South Korea. Only the US and Israel seem to be in a position to compete with these Asian countries in this type of cutting-edge chips.

Figure 11. Global semiconductor manufacturing capacity location, 2020 (% of fabs producing 10nm nodes and below)

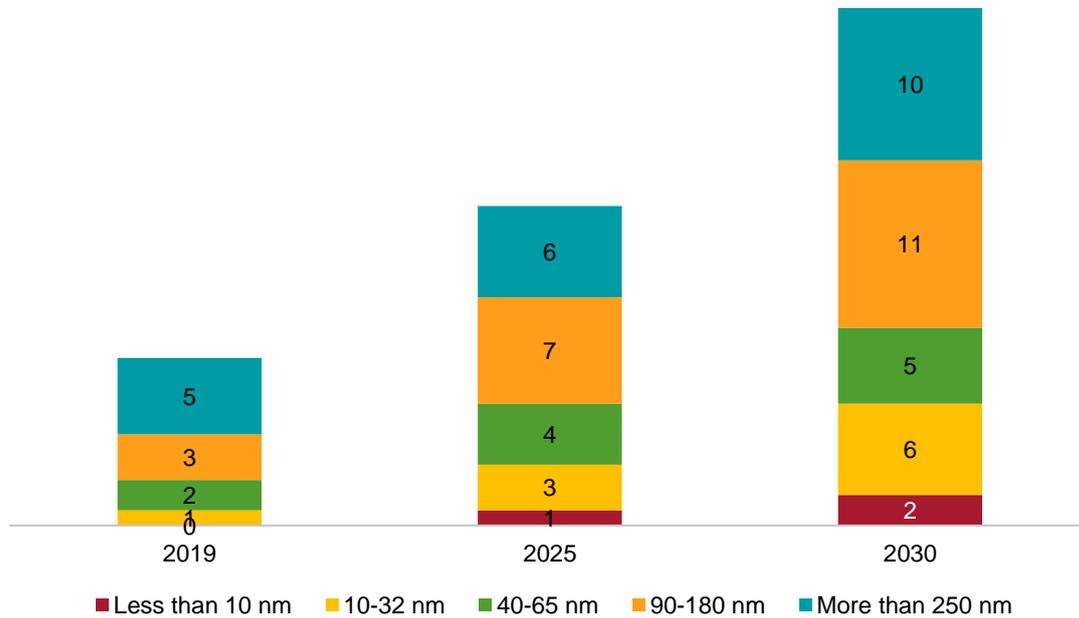


Source: the author, based on Kearney and Bertelsman Stiftung 2020.

Even if the starting position of the EU for cutting edge chips is not positive, the main question to be answered is whether the EU actually needs to make substantial efforts to change this. Personal electronic devices need more advanced chips, whereas vehicles are mostly based on so-called legacy chips. One of the most vibrant and chip intensive use industry in the EU is the automotive industry. As shown in Figure 12, most automotive wafer demand will continue involving in the future semiconductors of more than 90nm.

⁴ In 2023 the EU has two leading semiconductor firms: IMEC and ASML. In 2023 ASML is the only known company worldwide to produce systems that manufacture them. ASML said in a statement that only its 'most advanced' immersion lithography tools are affected by export controls. This decision means that the Netherlands decided to restrict the sale of directly impacted ASML's capacity to export products to China without a specific export licence. This initiative was part of the pressure exerted by the US on the Netherlands, to converge together with them and Japan to a similar export restriction regime on semiconductors towards China.

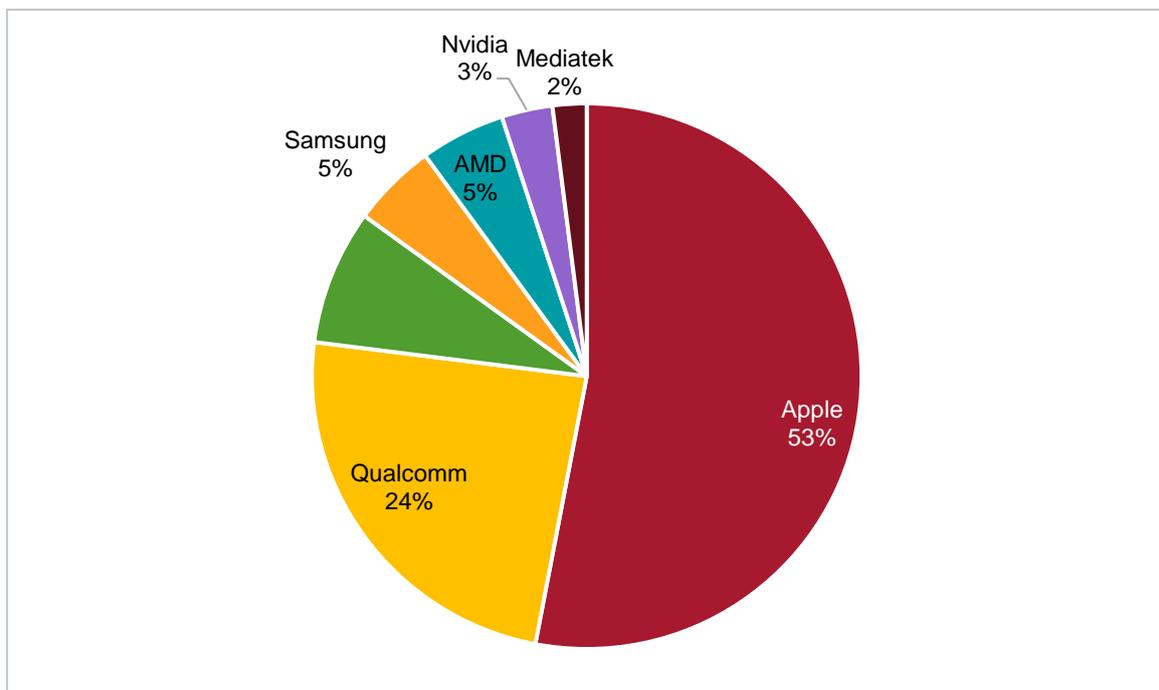
Figure 12. Annual demand for 12-inch wafer equivalents, automotive semiconductors, by nanometres (nm)



Source: the author, based on Mckinsey 2020.

Moreover, Figure 13 shows that in 2021 Apple, Qualcomm, Samsung, AMD and Nvidia demanded 90% of 5nm chips. None of them are EU companies.

Figure 13. 5 nanometre wafer shipment breakdown by customer, 2021



Source: the author, based on Counterpoint Research 2021.

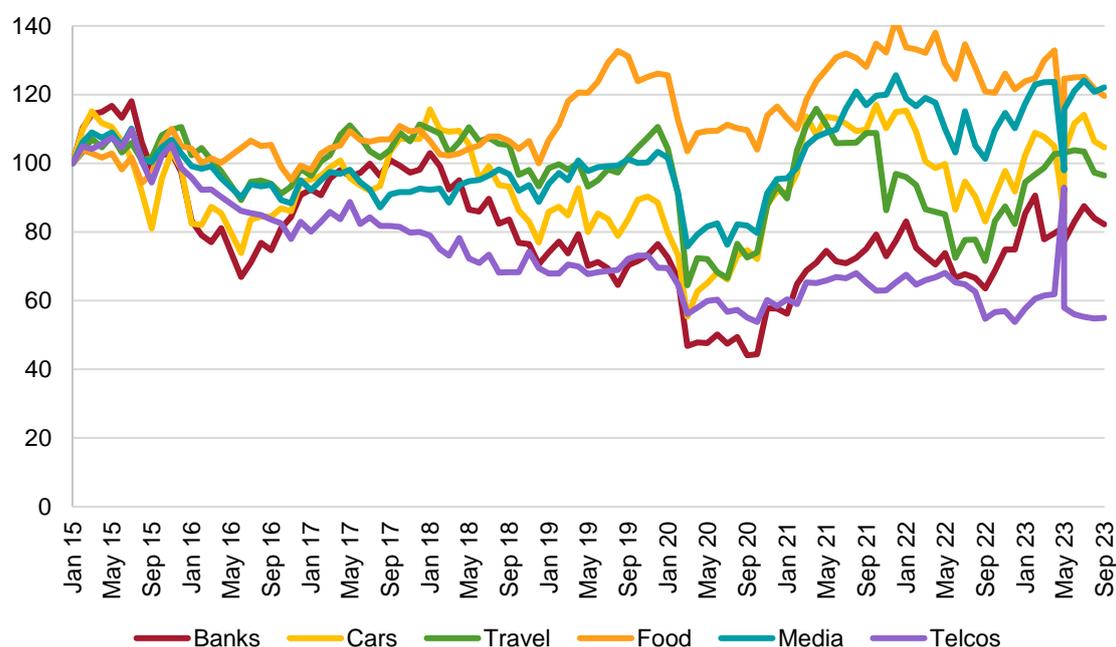
Therefore, even if the Digital Compass presented by the European Commission back in 2021 indicates that the EU should strive to host manufacturing capacity below the 5nm node, in light of the structure and needs of EU industry and the large amount of dependencies the EU needs to tackle in several fields, it would be most advisable for the Union to focus on prioritising and putting more effort on legacy chips, at least initially. Once the EU has made progress in reaching the 20% global share production target and has better ensured the value chain of its main industries, like in the automotive sector, plans could be adopted to take part in the manufacturing of more advanced chips.

(4.7) Principle 7: pro-investment regulatory environment

In some instances, there seems to be a degree of contradiction between the current regulatory environment for strategic companies and the expectation that they will deliver and meet EU funding needs. This is the case, for instance, of EU telecommunications companies. [According to the European Telecommunications Network Operators' Association](#) a funding gap of €174 billion has been identified for 2030, which might lead to around 45 million people in the Union being left without broadband by that time. In turn, there will be an increasing need to raise the volume, speed and capacity of telecommunications infrastructures to allow content flows across the Union, due to a more intensive use of networks and highly advanced technologies, such as Augmented and Virtual Reality, and IoT.

However, as shown in Figure 14, since 2015 the share price of the main stock market index of European telecommunications companies has fallen by 45%, compared with rises of more than 22% in media companies, 19% in food and beverage companies and 5% in companies in the automotive sector. Even the share prices of European banks, a sector that has been punished in the stock market in recent years, have fared better, with a fall of 18%. This difficult situation seems specific to the EU, as during the same period the share price of major US telecommunications companies fell by almost half (26%).

Figure 14. European company share prices by sector, 2015-24 (STOXX 600 monthly data by sector, January 2015 = 100)



Source: the author, based on Investing.com.

For the EU to achieve its digital transformation goals, the regulatory environment needs to be revamped and become more investment friendly, following an EU mid-long term strategy. In the specific case of telecommunications companies, there is first a need for a reform of the applicable EU telecoms sector regulation, which dates back to the 1990s and seeks to ensure price competition but not to encourage all the necessary investments to be made in the coming years. Secondly, a paradigm shift is needed from the principle of ‘at least four telecom companies per Member State’ to a concentration of the sector to ensure greater scalability of competition. This is not about harming competition, but it is about curbing hyper-competition, which is proving so damaging financially for European telecommunications companies. Third, State aid rules need to be adapted to the current reality, which is also challenged by a growing series of initiatives such as European Industrial Alliances or Joint Undertakings.

(4.8) Principle 8: ambition in key regulatory reforms

Since the Capital Markets Union (CMU) was launched back in 2015, more than 10 legislative proposals have been approved by the co-legislators. Yet EU financial markets are still fragmented. Member States are aware of this and, as an example, in September 2023 Germany and France tabled a [joint roadmap](#) for the CMU. The Franco-German roadmap points to four areas of action, namely: (1) unlocking the potential of European capital markets within the current CMU agenda; (2) exploring the potential of a bottom-up approach to the CMU; (3) promoting agile regulatory and supervisory responses; and (4) laying the groundwork for an ambitious new CMU agenda.

Starting with the first area, a number of files currently under negotiation are listed as priorities: (1) the Listing Act, to enhance SMEs and innovative firms access to equity and

market-based debt financing; (2) Solvency II review to foster the role of securitisations in freeing up new lending capacities; (3) EU Clearing Strategy to ensure strong EU capital markets and competitive clearing facilities; (4) review of Packaged Retail Insurance-Based Investment Products (PRIIPs) regulation on Level 1 to improve transparency and comparability of financial products for retail investors; (5) Sustainable Finance, with (a) extension of EU Taxonomy framework to economically important activities related to the transition, (b) amendments to SFDR in Levels 1 and 2 for more clarity, (c) ESG ratings and (d) consolidation and correction of the existing framework where necessary; (6) development of a joint European approach within the European Scale-up Initiative with regards to European exit routes for scale-ups; and (7) taking note of the European Commission's proposal on harmonising insolvency frameworks.

The second area of action refers to the promotion of a bottom-up approach. Up until now, the CMU has been focused on harmonisation, but a bottom-up approach could be explored for best practices sharing and peer-to-peer learning. Domestic regulation changes would be presented at Ministerial level and would inform the agenda of the Commission.

The third area would consist of promoting agile regulatory and supervisory responses. For this, three avenues should be explored: (1) for each legislative piece, the Commission should present a comprehensive competitiveness check; (2) assessing options to make financial market regulation more adaptable to the high pace of capital markets developments; and (3) assessing ways to improve the analytical basis informing the legislative decision-making process, on the basis of an effective use of data.

Finally, the roadmap calls for a new CMU agenda, with the Eurogroup in inclusive format being the forum to produce an ambitious to-do list and provide further input to the Commission.

It is excellent news that Germany and France have decided to focus on a key project for the deepening of the Economic and Monetary Union and for covering EU additional funding needs such as the CMU and have come up with a roadmap, which usually helps leads to progress in negotiations. It is also commendable that the roadmap presents a strategic view on the pending files, in view of the scarce remaining time of the current EU legislative cycle. Nevertheless, ambition could be lacking in some respects: in particular, when it comes to a new CMU agenda, harmonisation of company and tax laws is not mentioned and attempts to further harmonise insolvency frameworks are received with a tepid 'take note'. Also, the replacement of harmonisation attempts by a bottom-up approach could ultimately end up reducing ambition for the CMU agenda.

All in all, given the current moment in the EU's institutional cycle, finalising the pending open files seems a sensible approach. Still, for the next institutional cycle, real ambition is needed for the CMU, and this probably should involve harmonisation of insolvency, company and tax laws, as well as institutional reforms, to provide ESMA, for instance, with greater powers.

(4.9) Principle 9: efficiency in technical and political negotiations

Finalising the Banking Union is commendable and absolutely necessary from the perspective of financial stability and a strong and resilient Economic and Monetary Union. In order to finalise the Banking Union, co-legislators still need to agree on a revamp of the Crisis Management and Deposit Insurance framework as [proposed by the European Commission in April 2023](#) and on a European Deposit Insurance Scheme, [proposed by the European Commission back in November 2015](#), but with no progress up to date on the latter. Moreover, an arrangement to ensure adequate provision of liquidity in resolution should also be agreed upon. Technical staff have devoted long hours to try to find common ground on these topics and at the political level the idea of making a balanced progress on the fields of risk sharing and risk reduction has also been tried. Nevertheless, Banking Union negotiations are in a stalemate. Technical work on Banking Union related files seems to be complete for the time being and political masters do not seem to be in a position yet to agree on sensitive files.

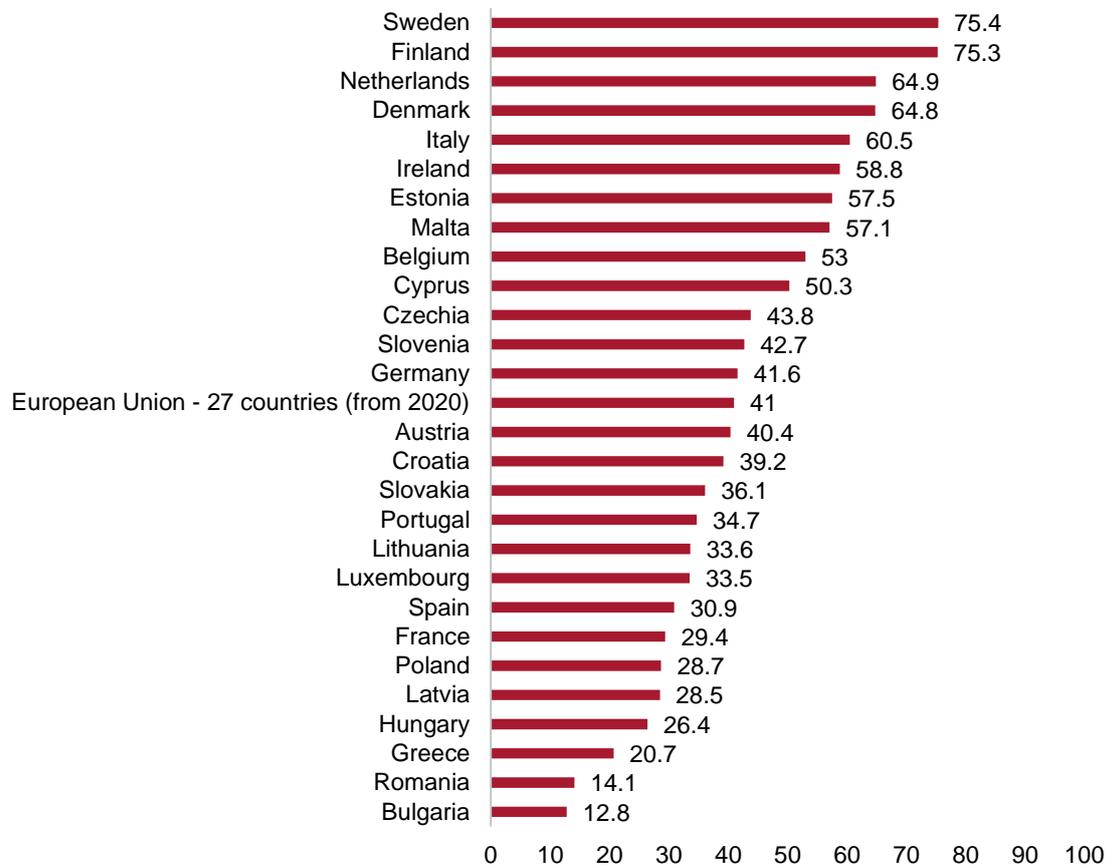
In light of the above, efforts of both technical staff and political masters should be devoted to other less explored and potentially less controversial areas. This relates precisely to putting more effort into the Capital Markets Union, which would simultaneously create [synergies for the Banking Union](#), as more integrated capital markets at the EU level would foster cross-border banking activities and the resilience of banks.

(4.10) Principle 10: increased trust in strategic partners and avoidance of unwarranted protectionist measures

Among the several targets embedded in the EU's Digital Decade 2030, [two refer to cloud and edge computing and imply that by 2030](#): (1) 75% of European businesses should use cloud-edge technologies for their activities; and (2) the deployment of 10,000 climate-neutral and highly secure edge nodes to provide the necessary connectivity and enable rapid data transfers. Besides, cloud and edge computing are key for the green transition, as both will contribute to the sustainability goals of the European Green Deal by fostering new digital solutions.

Nevertheless, the EU is not at the forefront in the use and provision of cloud services solutions. Indeed, according to Eurostat, in 2021 cloud uptake by EU businesses was [barely above 40%](#) and it was mostly for e-mail (79%) and storage of files (68%), with stark differences between Member States (see Figure 15).

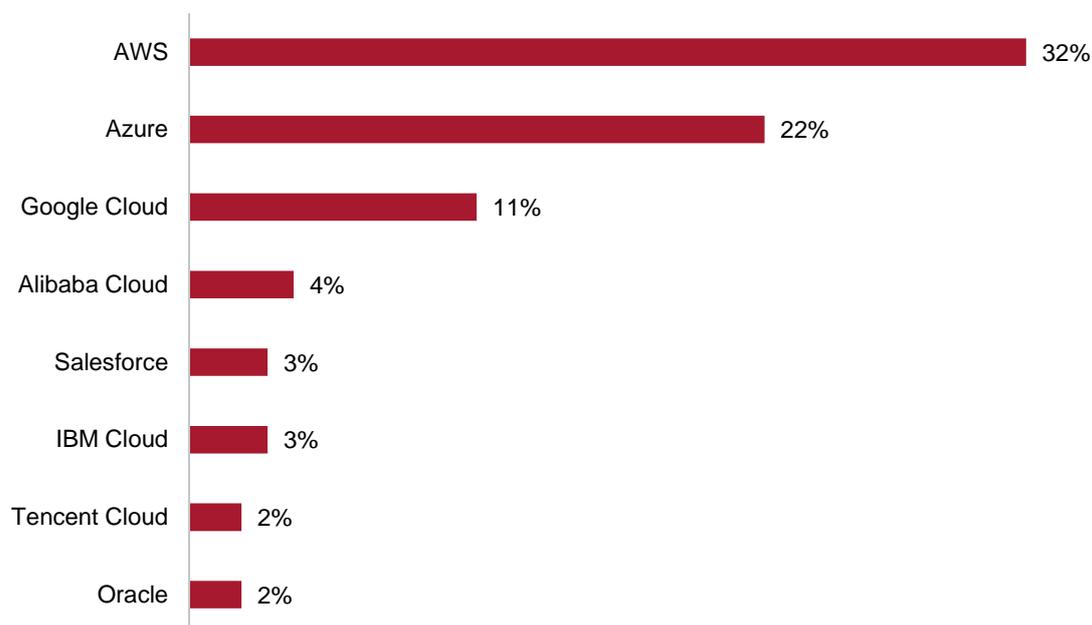
Figure 15. Companies using cloud services (%)



Source: the author, based on Eurostat.

As shown in Figure 16, US tech firms like Amazon, Microsoft and Google currently dominate not only the European cloud computing market, but the global one, with Chinese firms like Alibaba and Tencent also among the global players. At present, there are no European cloud champions.

Figure 16. Global share of cloud providers, 2Q23 (%)



Source: the author, based on Statista.

[Schrems II](#), a landmark ruling by the European Court of Justice in July 2020, had significant implications for US cloud computing providers operating in the EU. The ruling invalidated the EU-US Privacy Shield framework, which had allowed the transfer of personal data between the EU and the US. The decision emphasised the need for robust data protection measures and raised concerns about US government surveillance practices. In response to Schrems II, the EU adopted an adequacy decision on the Transatlantic Data Privacy Framework, based on the following principles: (1) data will be able to flow freely and safely between the EU and participating US companies; (2) a new set of rules and binding safeguards have been introduced to limit access to data by US intelligence authorities to what is necessary and proportionate to protect national security; (3) a new two-tier redress system to investigate and resolve complaints of Europeans on access of data by US Intelligence authorities, which includes a Data Protection Review Court has been foreseen; (4) strong obligations for companies processing data transferred from the EU, which will continue to include the requirement to self-certify their adherence to the Principles through the US Department of Commerce have been introduced; and (5) specific monitoring and review mechanisms have been foreseen.

While it is true EU companies are heavily reliant on third country companies for the provision of critical cloud services, this reliance needs to be assessed against the Economic Security Strategy of the European Commission. One of the three principles the [Economic Security Strategy](#) tabled by the European Commission is based on refers to 'partnering with countries who share our concerns on economic security as well as those who have common interests and are willing to cooperate with us to achieve the transition to a more resilient and secure economy'. To this end, the Commission and Member States will deepen their analysis of critical supply chains, stress test them and

establish the level of risk. Four types of risks have been identified, namely risks to: (1) resilience of supply chains; (2) physical and cyber security of critical infrastructure; (3) technology security and technology leakage; and (4) weaponisation of economic dependencies or economic coercion. These risks can occur along the entire value chain, from knowledge creation and basic research to commercialisation and manufacturing at scale.

Thus, the Economic Security Strategy by the Commission calls for a distinction in the assessment of dependencies according to the country involved. The US has been a traditional ally of the EU and in fact, the EU has outsourced critical aspects to the US, such as military defence or means of payments, with the US turning out to be a reliable partner.

If the EU is to reach the targets of the EU Digital Decade, cooperation and reliance on strategic partners is needed. For sure, this does not mean the EU should stop fostering its digital environment and in particular, EU cloud providers. Ideally, cloud providers would be EU companies. Nevertheless, given the gigantic challenges the EU is facing in the digital field, balanced measures should be adopted. In this regard, any 'Buy European' clauses or any [badly designed European Cybersecurity Certification Scheme for Cloud Services \(EUCCS\)](#) would lead to unwarranted protectionism and would probably hinder EU digital progress by increasing the risk of using technology that is not up to date.

In conclusion, protectionist measures with allies should be avoided, while at the same time promoting EU companies. The latter can be better pursued by making use of other initiatives, such as data lakes or [Important Projects of Common European Interest \(IPCEI\)](#).

Conclusions

The EU is facing a mounting number of challenges that will require a very large volume of funds. If the targets are to be met for the EU to remain relevant on the global stage, current practices in some areas need to change. These refer to administrative procedures, institutional architecture, prioritisation of investment needs and reforms and a correct identification of potential allies. Time will tell whether the EU is up to the task ahead.