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RETHINKING THE EU CONSOLIDATING EMU IN A FRACTURED WORLD.
A yearbook on the Euro 2025

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FOREWORD

Fundación ICO and the Instituto Español de Analistas jointly decided in 2012 to publish an annual review of the Euro, the Yearbook, to expand knowledge and raise awareness of the single currency and suggest ideas and proposals for strengthening its acceptance and sustainability. This partnership translates into the regular production of an annual publication to inform readers of the changes that have taken place in the monetary, banking, fiscal, economic, and political union, highlighting progress, limitations, and possible shortcomings. This year's edition has been joined by the Círculo de Empresarios.

The report we are presenting now, the twelfth in the collection, is titled *Rethinking the EU. Consolidating EMU in a fractured world. A Yearbook on the Euro 2025*.

This Yearbook edition starts by describing the uncertain political outlook and potential outcomes, followed by analyzing a key structural economic problem of Europe: insufficient productivity growth. Then, we try to explain what it means for monetary policy in general and for the ECB in particular, the awakening of inflation after a long period of concern about deflation. Three fiscal issues are considered this year: (i) the first-time implementation of the new EU fiscal rules, (ii) the problems in Germany and France and what they mean for the sustainability of the Eurozone, and (iii) how to finance the huge public investment needs stemming from demographics, defense and global warming considerations. Two financial issues in regulation follow: (i) the simplification and harmonization of financial regulation and the competitiveness of the EU financial system, and (ii) the challenges to a level international banking playing field. The Yearbook ends with two studies on digital finances: (i) a critical assessment of the digital euro project, and (ii) an evaluation of the EU approach to regulating digital assets, DORA.

The report includes, as it is customary, an executive summary that presents a critical analysis of the different contributions and concludes by summarizing in a few words what the authors recommend in each chapter.

We continue to believe that it is necessary to explain the Monetary Union and to raise awareness about its implications. The Euro Project is too often taken for granted, but it still needs to be better understood and improved. Throughout this report, we undertake the task of ensuring its sustainability.

The Yearbook is a collective effort led by Professor Fernando Fernández Méndez de Andés, who has selected the different topics and chosen an impressive team of experts with close ties to academia, policymaking, and the financial community. We want to express our gratitude to each of them and congratulate them on a job well done.

Instituto Español de Analistas, Círculo de Empresarios, and Fundación ICO are confident that the Euro Yearbook 2025 makes an important contribution to the current debate on Monetary Union and European integration and will prove useful and interesting to all readers.

Instituto Español de Analistas	**Círculo de Empresarios**	**Fundación ICO**

EXECUTIVE SUMMARY. RETHINKING THE EU. CONSOLIDATING EMU IN A FRACTURED WORLD

Fernando Fernández[1]

1. THE EUROPEAN UNION IN A FRACTURED WORLD

The world as we have known it for almost a century seems to be coming to an end. Globalization, free trade, international cooperation, democracy, the market economy, the rule of law, are all being questioned and restricted in large parts of the world, and from very different political perspectives. Apparently, and this is a matter of serious concern, there is a large and growing public opinion that these old mantras need to be revised, managed, reinterpreted, adapted. In other words, abandoned and substituted for a new world order. A world order that seems dangerously defined by strong and charismatic authoritarian leaders with no respect for due processes, no consideration for the necessary checks and balances, no limitations to the use of power, and no time to waste to save us from whatever dangers they seem fit. Politics are becoming discretionary if not capricious. Economic policies unpredictable and irrational. Mercantilism is on the rise. Government intervention in the economy is increasingly pervasive. Economic arguments that would be considered extreme, marginal or simply wrong, are now the foundation of many policy decision with profound global consequences. And not only in the United States of America.

Two words define the global outlook, uncertainty and fracture. Uncertainty because nothing can be taken for granted any more, and nothing may last more than a twitter

[1] Fernando Fernández Méndez de Andés, professor of Economics and Finance, is currently a member of the Board of Governors of Banco de España and of its Executive Council. Editor of the Yearbook since the first edition. The opinions expressed in this summary, when not explicitly attributed to the authors of the different chapters, are exclusively his own and may not, under any circumstance, be interpreted as representing the views of Banco de España and the Euro system.

news cycle. Everything is now possible, including war conflicts escalating and spreading globally. And it is more than just possible that the United States of America, the political, ideological, and economic anchor of the old world order, decides to abandon it as its leadership becomes convinced that it does not play to its advantage any longer, the trade deficit being simply an excuse. It would be reassuring to believe that it is just Donald Trump´s obsession to make America great again, but who could guarantee that his XIX century vision of America will not survive his presidential term? At the same time, does anybody really know what President Trump wants to do with China, Russia, NATO, Ukraine, trade tariffs, the dollar, digital assets, etc.? Does he know? Not surprisingly, political and policy uncertainty indicators are at extremely high levels. And they will continue to stay there for quite some time.

Fracture is the other major theme. Political and economic fracture that goes far beyond the divisions of the cold war. Then, the international divide was simple and clear cut. The world was neatly split between friends and enemies. With friends, which were trusted, one cooperated, traded, negotiated and offered support in times of need. To enemies, one fought endlessly and tried to bring into your camp. But those marching lines, those clear camps are simply not present anymore. Who defends traditional "western values"? who are Europe's allies? Which countries, what leaders share our values and vision of the world? Do we even have the same values inside the EU? This fracture runs deeper than fragmentation; the different parts of the world are drifting away, and they show no interest in re-approaching nor in at least keep talking. This fracture will last, because trust has been seriously eroded. Reconfiguring a new world order will take time, and will be messy and costly. The American friend that saved Europe from its demons twice in the XX century cannot be trusted anymore. It is obviously not the reliable partner Europe needs in Ukraine to contain Putin's expansionism. And it is certainly not the reliable partner Europe needs for the digital revolution or the energy transition. Not to mention the issue of how to respond to China´s claim for power.

Political scientists will need to work hard in explaining how this fracture came about and what to do to mend it. Fortunately for economists, we are entrusted with a much simpler role: assess the consequences of this shift in values, policies and priorities; propose alternative scenarios and offer some remedies to limit its substantial costs. And to start doing this, we have dedicated the 2025 Yearbook which once again has been adapted to the changing political European landscape.

The old order is dying, but the new order is not even pregnant yet. Europe's role in it is a question mark. The prevailing naïve optimism about our ability to shape the future as the standard setter of the world is unjustified. The risk of marginalization cannot be ignored. Empires, global powers, dominant cultures are not eternal. Europe will need to strengthen its political, economic, and military might to be decisive or at least significant. In all these three fronts there are institutional reforms that have been unduly postponed, entrenched policies to change, large investments to make. All of them will require strong leadership and high political capital, two commodities in short supply these days in Europe. It means advancing the federal idea of the Union while improving its democratic legitimacy and accountability. Because the European Union is more needed than ever in this fractured and uncertain world. Needed both for its member states and for the world. No individual European nation has a chance to play on its own any meaningful role in a polarized USA-China regime. The EU foundational idea of economic interdependence to foster peace, social development and human well-being is a necessary lighthouse in times of growing nationalism, isolationist tendencies and mercantilist economic policies.

In our concrete sphere of interest in this Yearbook, economics, it is safe to assume that the new world order will come with an increase on trade tariffs. The magnitude of which still uncertain. As it is uncertain the response of the rest of the world to the unilateral decision of the USA administration. At this point it is clear that there will be some form of retaliation, however carefully targeted, from the European Union. Discussions in Brussels range from an open trade war with the USA in the TACO spirit (Trump always chickens out) to a more balanced and selective response in fear of causing a global recession. A recent debate between two world class economists and friends, Larry Summers and Olivier Blanchard, was very illustrative to this effect, with the American emphasizing basic economic theory that retaliation only hurts the country tant embarks on it, and the French requiring a swift and harsh political response to American unilateralism. It is therefore convenient to remind the reader of the basic economics of trade tariffs. Although it may seem intuitive that taxing imports would reduce net imports, tariffs do not have a direct impact on the balance of trade. The trade balance is driven by net lending and borrowing between the United States and the rest of the world. Instead of reducing net imports, tariffs simply reduce overall trade, and therefore economic efficiency and global growth.

Additionally, tariffs tend to appreciate the currency of the country that imposes them, in this case, the US dollar. If this has not happened, it is because the unpredictability of Trump economic policy has eroded confidence on the USA and on its currency. The fact that the US dollar, the so far undisputed reserve currency of the world, is not performing as safe haven is a major source of financial instability in the short run. But it may also create an opportunity to consolidate the international role of the euro beyond its current status as a purely regional currency. The fact that other imperfect substitutes, mainly gold and digital assets, bitcoin mostly, are currently playing that role of providing security, is a clear indication that investors find the Euro Area lacking some necessary institutional and market features.

Completing the Monetary and Capital union, the Savings and Investment union, SIU, is an obvious step, as the Commission has adequately stated. Although most of the necessary work is legislative and political in nature, and its implementation will fall mostly on the European Securities and Market Authority, ESMA, there are certain things the ECB can do to facilitate it. The simplification of its prudential, supervisory and regulatory activities, a work in progress at the Governing Council and the Supervisory Board of the ECB, will help the SIU. Ensuring that bank liquidity can circulate freely in the Eurozone, avoiding national forbearance of deposits, should be a priority, but it would require advancing with EDIS, the European Deposit Insurance Scheme. Banking crisis management could be consolidated into a strengthened Single Resolution Board that integrates all national relevant entities and merges deposit guarantee systems. Moreover, including the competitiveness of the Euro financial system as an explicit objective of the ECB supervisory review would facilitate banking union and ensure an efficient European banking system in a level international playing field. As previous editions of the Yearbook which have treated CMU extensively have argued, if the EU is this time serious about a long overdue project, it will need to think through the current distribution of competencies in these areas between the Union and its member states and consider further transfers of sovereignty.

Enlarging the pool of zero risk euro assets is also mandatory for financial markets in euros to gain sufficient depth and liquidity, a necessary condition for the euro to become a world reserve currency. Financing the security, defense, and energy transition, obvious common public goods, provides the opportunity. But at the cost of complicating the financing of member states sovereign debt, since overall public indebtedness in the European Union is already at very high levels and crowding out effects are a real possibility. Time to make hard choices in Europe. Debt incrementalism will not work. Further tax increases will only erode growth potential and exacerbate productivity problems.

Finally, economic intuition would suggest that tariffs, like other excise taxes on products, should raise prices. Whether it results in a one-time adjustment to the price level or a persistent increase in the rate of inflation, will depend on (i) the response of the European Central Bank, (ii) the reaction of other countries, i.e. China, trying to substitute for the US market and unloading its "excess exports" in Europe, and (iii) in the probability of a global recession.

The international trade outlook has deteriorated markedly. But there is much the EU can still do by deepening its internal single market, as the highly quoted Letta and Draghi reports have reminded us. Removing remaining barriers to trade within the EU, moving decisively in service trade liberalization, and advancing the capital markets union would provide European firms with a large customer base, a necessary condition for increasing size and productivity, accelerating the adoption of new technologies and augmenting R&D investment. A careful reconsideration of EU competition policy is in line to account for the "relevant European market". But productivity enhancing policies also require strong domestic efforts: (i) easing remaining administrative barriers to entry in many sector and occupations, (ii) shifting labor market regulations to protect workers, not jobs, (iii) encouraging business dynamism and rotation, and (iv) tax policies that incentivize firm growth and reinvesting of firm benefits. In sum, EU economic policy should refocus on fostering economic growth and creating an attractive business friendly environment if it wants to compete in the new world order. Unfortunately, the European political debate is too often limited to finding new ways of providing more public funding, more active industrial policy, more state intervention in so called strategic sectors. The European Union needs to find a way out of this doomed loop.

A new world order is emerging, and the role of Europe is not guaranteed. Global priorities have shifted to defense, security and economic nationalism. None of which appeared in the top of the European agenda a few years back. Although following through on the European Green Deal may seem still a priority, the EU needs to trim its climate ambition in light of political realities, are we willing to tax European companies and citizens in splendid isolation? and consider systematically the growth and employment costs of climate action, once the illusion of a free transition has vanished. At this critical global juncture, it seems mandatory to defend what is most important, an open rules based international economic order. To this effect the European Union should apply whatever international political capital it has, whatever soft power it maintains. But at the same time, it has to work on reducing its vulnerabilities, political and economic, to improve its hard power. Politically, governance reform and changes in EU decision making are mandatory. Majority voting should be widened to new areas. Neither enhanced cooperation nor even treaty changes could be off the table, as we have been consistently arguing for years. Economically, low productivity and high sovereign debt are problems to be urgently addressed. Both would improve by completing the internal market and the Monetary and Capital Union, and by focusing policies on economic growth and creating a business friendly environment.

2. CONSOLIDATING THE MONETARY UNION

This 2025 Yearbook is once again a collective effort. I have been fortunate to have as contributors an impressive list of professionals from very diverse background, perspectives, current positions, and past experiences. But they all share two common understandings. One, that the European Union is a much needed stabilization factor in the current fractured world. But two, that the EU needs to change to continue exercising its positive and significant influence. And to that effect, they provide the reader with the tools to understand what is happening and what needs to happen. As editor, I have tried to cover all relevant policy discussions in Europe in the limited arena of economic and financial policies. I have also maintained in this executive summary my prerogative, for the benefit of the reader, to complement or question some of the recommendations of the different authors with my own views.

If in 2024, the Yearbook left a unanimous sense of satisfaction and concern, concern is the only conclusion of 2025. A concern that goes beyond our usual preoccupation for the many issues left unsolved for too long in the Monetary Union. Issues that could one day make us pay a heavy price in term of social, economic and financial stability. A concern for the state of the world, for the immediate future and for the potential long lasting scars on our well-being as global citizens. But this concern cannot distract us from our obligations. And the obligation of the Yearbook is to shed light on the fiscal, monetary, and regulatory aspects of the European Monetary Union.

Contrary to past editions, this yearbook is not organized in the traditional four sections -the context, monetary policy, fiscal issues and regulatory policies-, although it covers all those four. This time it is more issues oriented. This Yearbook edition starts by describing the uncertain political outlook and potential outcomes, followed by analyzing a key structural economic problem of Europe: insufficient productivity growth.

Then, we try to explain what it means for monetary policy in general and for the ECB in particular the awakening of inflation after a long period of concern about deflation. Two fiscal issues are considered this year: (i) the first-time unsatisfactory implementation of the new EU fiscal rules, (ii) the problems in Germany and France and what they mean for the sustainability of the Eurozone. Two financial issues in regulation follow: (i) the simplification and harmonization of financial regulation and the competitiveness of the EU financial system and (ii) the challenges to maintain a level international banking playing field. The Yearbook ends with two studies on digital finances: (i) a critical assessment of the digital euro project, and (ii) an evaluation of the EU approach to regulating digital assets, DORA.

2.1. THE POLITICAL, ECONOMIC AND MONETARY CONTEXT.

The Yearbook starts studying the political context, providing an account and interpretation of the international outlook and political developments within the European Union. This year, this is a more obvious need. **José María de Areilza** writes in chapter 1, *Europeans in a world of dysfunctional superpowers*, a paper that asks a fundamental question, how should Europe approach Trump´s implosion of the international order.

The author explores the shifting geopolitical landscape and its implications for Europe. The document highlights the end of a long era in international relations, "the end of the end of history." Lasting wars, such as those in Ukraine and Gaza, accelerate historical changes. The return of large bloc confrontations, particularly between the U.S. and China, is evident. The focus of foreign policies has globally shifted from global prosperity to national and regional security, a worrisome and widely encompassing term. Perhaps not surprising, the rise of "strongmen" autocratic and charismatic leaders with simple solutions to complex problems is evident in both democracies and autocracies.

For Europeans, and for all those who believe in a rule-based liberal order and market economy, Trump's second presidency is bad news. In a few months Trump has broken bridges with its allies, inflicted unnecessary damage to its economy, put the dollar exorbitant privilege at risk, and pulverized American soft power. His foreign policy, a populist mix of isolationism and imperialism, questions the western alliance of values and policies and weakens transatlantic relations precisely when it is more needed, when Russia and China are challenging it militarily and ideologically. And it stresses the internal cohesion of the Union.

Trump can be no excuse for Europe to face reality. The US, with or without Trump, is withdrawing from Europe. Its strategic goal is elsewhere, containing China. For many decades now, the Unites Sates foreign policy priority has been to contain China, the rising superpower rival. Trump did not change that priority. It has "only" brought chaos and unpredictability to its implementation. But also, for a long time, with different parties and presidents in office, the US has not been confident that it can count on Europe for that challenge. At the same time, Russia, the number one security problem for Europe, is increasingly a marginal issue in Washington. And we have not been able to convince America, and many other countries, of how serous this threat is to stability, prosperity, and peace.

This chapter raises an important red flag when arguing consistently that the two alternative strategies currently being discussed in Brussels and European capitals are unrealistic. First, decoupling from the USA is politically, technologically, economically and energy wise, simply impossible. Even more so, to do it on time to confront Russia. But Trump has brought to new life the old dream, to some of us the nightmare, of building Europe against America. Second, political rapprochement with China arguing trade and economic considerations, precisely when under Xi Jinping is retreating to statism and turning its back on human rights, is equivalent to surrendering everything Europe has believed and worked for since the Enlightenment. But Areilza is an optimist by nature and argues for a new approach. One that will require intelligence, patience and vision. Europe must preserve its Atlantism, continue to engage and negotiate endlessly with Washington while developing its own capabilities, widening its options and reducing its obvious vulnerabilities. One presidency, no matter how long and harmful it might be, should not, cannot, make us forget that the United States and Europe share the same values. Let me add my own emotional pitch to Areilza's much more sophisticated thinking, the US did not abandon Europe when the continent submerged in its darkest hours. Beyond our common economic interests, we owe Americans that much.

Europe is obviously not comfortable in a world where security is paramount, but it must adapt to it, requiring a shift from introspection to strategy. Too much time is spent in Europe looking internally at its own problems, its heterogeneity and the need for internal reform. This Yearbook has argued consistently for the need to complete the European architecture, particularly in our area of interests, economic and monetary union. A call for reform that needs to be extended beyond that more technical realm. The centralization of security and defense policy in Europe requires the strengthening of democracy and legitimacy of the Union. "It is a question of being able to take decision effectively, with a much larger budget and with institutions subjet to the rule of law and more able to be accountable to the citizens".

The EU has faced multiple crises, not only economic. It must now formulate a political strategy to become a significant geopolitical actor. This includes developing defense capabilities, strengthening the economy, and maintaining the transatlantic link. Europe must be a leading force in avoiding the trap of realism in international relations, the power of force, and continue to advocate for diplomacy, negotiation, and a rules-based world order. For this, Europe has to be able to display more than just soft power. The EU's reaction to Trump's policies should be strategic, aiming to renew multilateralism and economic and political freedom.

In chapter 2, the Yearbook begins to focus on the economic and monetary union. During 2024, the Euro Area economy experienced a gradual and very modest recovery in activity while inflation continued its convergence to the 2% target. In this context of falling inflation pressures and insufficient growth, the ECB started in June the normalization of its monetary policy, i.e. reduction of interest rates, and continued shrinking its balance sheet. As it is well known, this benign global economic outlook changed drastically with Trump trade policy to the point where uncertainty is at its highest and every economic outcome is possible, although to this date no major economic disaster scenario has materialized. Fortunately for the editor, and the reader, the Yearbook is not about forecasting short term performance, and we have replaced the traditional chapter on the evolution of the European economy for an analysis of one key structural issue, productivity, the principal determinant of real wages, purchasing power and long term growth.

Juan Francisco Jimeno calls his chapter, *Lagging behind: Productivity Growth in the Eurozone and the USA*, and consequently addresses the two issues, explaining the lag and making policy proposals to revert this negative trend. Productivity growth is the only feasible source of sustained economic growth and social welfare over the long run, as increases in income and consumption per capita, leisure time and resources for public policies can only arise from higher productivity. The fact that Europe has a productivity problem is well known and has been on the policy agenda for a long time. Too long because in the meantime it has gotten worse. This concern explains why the Draghi and Letta reports have become the most quoted pieces of economic analysis in Europe and have led the Commission to present its Competitive Compass in January this year. Let us hope with the authors that this time is different, and nice words are followed by concrete actions.

To this effect, Jimeno discusses the productivity growth trends in the Eurozone and the USA, highlighting the widening productivity gap between the two regions in historical context, providing the most recent data, and explaining the main drivers of productivity, such as technological adoption, investment in capital, market flexibility, and regulatory environment.

The long-run trends are relevant for various reasons. Most importantly, they show that minor changes in growth rates sustained over time result in large differences in productivity, and therefore in GDP per capita. Thus by 2022, Europeans worked 13% less hours than in the US, a difference that translated into about one third lower GDP per capita. And can be mostly traced to "the effect of the marginal tax rate on labor income". A blunt reminder that the famous European preference for leisure may just be the consequence of the high tax burden on labor income.

Recent data detailed in this chapter also show that productivity growth has been higher and has contributed more to GDP growth in the USA than in Europe in this XXI century. This higher productivity performance in the USA is mostly in the services sector, particularly in those subsectors with higher technological content. And this gap widened further after the COVID-19 crisis, since the USA adapted more effectively to new post-pandemic economic conditions, while Europe struggled with slower recovery. Perhaps, I may add, because of its excessive protection of zombie companies and zombie jobs. Interestingly, standard shift-share analysis by Jimeno concludes that intra sector changes in productivity are the main drivers of productivity growth across time, which speaks for fostering and not impeding firms' dynamics.

As we know, growth can only be the result of: (i) the use of more and better labor,

(ii) the use of more and better capital, and/or (iii) the increase in Total Factor Productivity, improvements in the combined use of both of the above. Standard growth accounting reveals that the USA's advantage stems from higher human capital, better investment in advanced technologies, and a more favorable regulatory environment. In contrast, Europe faces slower productivity growth due to lower investments and excessive regulation.

Two structural trends will condition economic and productivity growth in the next decades, the development and adoption of technologies associated to robotics and artificial intelligence, and demographics. This chapter emphasizes that "so far AI technologies are not so much substituting human labor as they are complementing skilled workers" and that Europe has lost the race in the developments of LLM (Large Language Models) the foundations of Generative AI.

Ageing of the working age population slows down productivity through three channels. Productivity growth is lower (i) at the late years of the working life, (ii) at all age groups in countries where population is older, and (iii) with a less balanced age structure of the working-age population due to age complementarities. In the context of continuing reduction of working-age population, productivity growth thus becomes even more important. A further reason for Europe to improve its efforts both in fostering the development and adoption of new technologies and in improving its regulatory and fiscal environment.

As the Euro Zone appears to have weathered the inflationary surprise with little damage in terms of foregone output and employment and is entering a new monetary cycle, **Pablo Hernández de Cos** writes chapter 3, *Reflections from the last inflationary episode*. The Euro-area economy experienced several shocks, leading to the highest inflation since the creation of the European Monetary Union. After a detailed and technical revisions of several features that could have altered the transmission mechanism of monetary policy[2], Hernández de Cos concludes that the monetary policy framework adopted by the ECB in 2021 was instrumental in bringing inflation down and delivering on its price-stability mandate. Nevertheless, this framework is to be reviewed in 2025, and while no drastic changes are needed, the author identifies here some areas for improvement.

The ECB's primary task, as defined by the 1992 Maastricht Treaty, is ensuring price stability in the euro area. The 2021 strategy review introduced a 2 percent symmetric target in the medium term. The author argues that this symmetric target is to be maintained and complemented with the ECB's emphasis on measures of underlying inflation and monitoring wages and mark-ups, as these measures filter out short-term volatility in headline inflation.

[2] First, banks are better capitalized and the industry more concentrated. Second, the high debt burden of the Euro Area. Third, the excess liquidity following negative rates. Fourth, the shift to non-bank financing. Fifth, the adjustment in house prices. Sixth, the persistence of weak growth and high uncertainty. And finally, the possible existence of non-linearities. As a result, the slowdown in credit has been more intense than predicted by historical standards.

The 2021 strategy emphasizes the need for forceful and persistent monetary policy response when the economy is close to the lower bound. Standard monetary theory calls for a differentiated policy response to inflation according to the nature of the shocks. And argues for greater patience in the face of negative supply shocks. However, patience does not mean inaction, and the ECB should respond actively to persistent supply shocks to prevent inflation expectations from de-anchoring, especially after long periods of low inflation. It is fair to say that the recent inflationary episode, despite being originally a supply shock, has surprised policy makers and markets alike for its magnitude and persistence, i.e. we have seen globally two digit inflation rates. Thus, the ECB's revised strategy should remind and emphasize the symmetry in the need for forceful action in both deflationary and inflationary contexts.

In the 2021 strategy, interest rates are considered the primary monetary policy instrument, with forward guidance, quantitative easing, and long-term refinancing operations also deemed appropriate. In terms of the toolkit at the disposal of central banks and the ECB, Hernández de Cos makes three points in this chapter: (i) interest rates have played a crucial role in the disinflation process, (ii) quantitative easing has proven useful in exigent circumstances, although the author does not comment on the relative merits of negative rates, and, (iii) quantitative tightening has had a smaller effects than the easing because of its gradual and predictable implementation. In other words, the significant reduction of the ECB balance sheet, around 30% from its peak, has not resulted in liquidity problems because the ECB has stuck to its preannounced schedule.

The monetary framework rests on voluntary reserves remaining large and ample at the endpoint of the quantitative tightening process. Thus, the deposit interest rate will remain as the key policy rate. It follows that the size of ECB payments to commercial banks in remuneration of their deposits at the central bank, is simply the necessary consequence of ECB policy. A deliberate outcome which has received much public attention and raised some undue political controversy. Were the monetary strategy to rely on daily auctions of liquidity, the so called MRO rate, the rate for the "main refinancing operations", will become the key policy rate, banks would not need to operate with abundant voluntary reserves and payments for them would not be substantial nor controversial.

The author makes an important political economy point that has arisen from the long period of QE. Obviously, monetary policy should be decided without any consideration to its impact on the potential losses of the Central Bank. Nevertheless, these losses and even more so potential additional capital contribution in case of need, may lead to political interference. A preferred approach could be to establish predefined rules for automatic recapitalization, an issue that is on the table in some significant central banks in the Eurozone. This legal provision would lift ex ante any potential external pressure and would also acknowledge that monetary and financial stability, as any other public good, may be costly especially in a digital world of declining seigniorage.

Under the current policy uncertainty, the ECB's strategy should be redesigned to guarantee robustness to different scenarios. Although the author recommends complementing the base line with alternative scenarios, he calls for caution in its publication, "not in a rigid manner". The return of inflation and the foreseeable long lasting uncertainty about core economic policies, call for emphasizing robustness to various scenarios, not solely deflation. The new strategy will require an enlarged degree of flexibility to be capable of adapting to the origin, magnitude, and persistence of known and unknown shocks. Unconditional forward guidance should be avoided, and there might be a need to distinguish more clearly between quantitative easing for market functioning versus monetary stimulus.

Since mid-2021, the euro-area economy has faced high and persistent inflation, caused by exceptional shocks, including the COVID-19 pandemic, supply chain disruptions, the Russian invasion of Ukraine, an extraordinary loose global fiscal stance, and perhaps even the cost of maintaining the monetary impulse for too long. Forecasting inflation during this period has been challenging, with large positive errors observed until mid-2022. "Even after controlling for errors in technical assumptions, forecast error are positive and account for around 30% of total inflation errors in the period", highlighting the need for improving forecasting tools. A deeper analysis of global an external shocks and how can they be incorporated into forecasting tools should also be a priority.

The ECB's monetary policy response during the inflation surge was initially gradual but became more forceful as inflation persistence became clearer. The ECB's actions ensured that inflation did not remain too far above the target for too long, preventing a de-anchoring of inflation expectations. The ECB's forward guidance in 2021 delayed its response to the inflationary shock. But Hernández de Cos responds to the criticism that the EBC may have reacted too late by arguing that the timing of the tightening was not particularly relevant, given the forceful response after the first hike. And he describes in the text of the chapter, certain model simulations to that effect.

To conclude this chapter Hernández de Cos reminds the reader that monetary and fiscal policy are strongly interrelated, with coordinated responses crucial during crises. In that respect, the ECB's transmission protection mechanism has helped stabilize markets and support the smooth transmission of monetary policy. But it is not a panaceas, and the ECB's strategy should emphasize the need for sustainable fiscal policies as a precondition for a well-functioning European Monetary Union.

2.2. ENSURING FISCAL CAPACITY AND SUSTAINABILITY DESPITE STRUCTURAL PROBLEMS AT THE CORE.

To ensure fiscal stainability, the European Union adopted in April 2024 a new economic governance framework which was put in place for the first time this year. In Chapter 4, **Esther Gordo** studies *The Implementation of the revamped Fiscal Rules: Another missed opportunity for addressing the debt problem?*

The shortcomings of the preexisting fiscal framework were notorious, both from a purely functional and a democratic perspective. The new fiscal governance aims to address high public debt levels and the need for credible consolidation strategies amidst unprecedented investment needs due to demographic ageing, climate change, digital transformation, and geopolitical instability. A dual and conflictive objective that lies at the core of any fiscal policy, but that in a Monetary Union is particularly relevant. However, the new rules are based on the premise that fiscal sustainability, reforms and investments are mutually reinforcing and should be fostered as part of an integrated approach. As a result, it is not surprising that the rolling out of the new fiscal rules has been controversial and clearly unsatisfactory.

The new framework introduces a paradigm shift in fiscal surveillance, moving from annual deficit targets to multi-year expenditure paths anchored in debt sustainability analysis (DSA). It also aims to reconcile fiscal discipline with flexibility and national ownership. For a full analysis of the new rules see the Euro Yearbook 2024, "In conclusion, the new fiscal rules are a step forward in coordinating fiscal policy in the EU. But simplicity has been sacrificed on the altar of flexibility, and credibility remains to be seen".

As Esther Gordo writes in this chapter, challenges remain, including weak enforcement mechanisms, limited involvement of national parliaments and independent institutions, and the absence of a common fiscal capacity to finance public goods. The framework's ability to accommodate increased defense spending and other public investment needs remains limited, "raising fundamental questions about the efficiency and legitimacy of the current allocation of spending responsibilities between the EU and its Member states." We should thank the author for her courage in bringing the devil in the room to the forefront of our discussions, do we need a larger EU budget? If so, how will it be financed? Will it increase the overall tax pressure of Europeans? And what procedural changes do we need to keep a minimum of democratic legitimacy in the budgetary process? These are questions that need to be addressed explicitly, if the Union wants to make any real progress in the overwhelming academic demand for a common fiscal capacity. We have been dodging these real political issues for too long.

The reform also introduced: (i) a country-specific assessment of debt sustainability risks, (ii) a single operational variable (net primary expenditure), and (iii) escape clauses for exceptional circumstances. These changes aimed to provide a more realistic and transparent framework for fiscal policy, but significant practical and implementation challenges exist. The lack of ambition in its design and the immense public investment needs "risk exposing the framework to an existential test even before it becomes fully operational." The reliance on Debt Sustainability Analysis (DSA) presents methodological challenges, including risk assessment, the use of unobservable indicators, and the uniform application of fiscal multipliers. These challenges may affect the framework's effectiveness in ensuring long-term debt sustainability.

The new framework requires Member States to submit national medium-term fiscal structural plans (MTPs). However, the completeness and realism of these plans has varied greatly, with many national plans lacking detailed forecasts and assumptions. The involvement of national parliaments and Independent Fiscal Institutions (IFIs) in the preparation of MTPs has been limited, raising concerns about the quality and credibility of the plans. The role and capacity of national IFIs have not been significantly enhanced, and their involvement in the assessment of MTPs has been minimal. I would personally add to this chapter's institutional assessment the unsatisfactory role played by the European Commission. There is a growing consensus among external observers that it has been excessively understanding of local political considerations, thus raising concerns about the rationality and functionality of entrusting the Commission with the role of the gate keeper and enforcer.

As history may repeat itself, Esther Gordo also addresses the issue that Germany and France fiscal needs may conflict with the new rules. For instance, full utilization of Germany's reformed debt brake could result in public debt raising from 63% to over 100% of GDP by the late 2030s. In France, the IMF is projecting the debt ratio to increase to 120% of GDP by 2027. Proposals under consideration, proposals that will require changes in the fiscal framework, are: (i) the exclusion of approved infrastructure and defense expenditure from the rules, (ii) a revision of the Treaty's reference value of 60% to 90%, and (iii) the elimination of the deficit resilience safeguard, requiring a minimum annual reduction 0,25 percentage points in the primary fiscal deficit. Proposals that will only add to market doubts about the commitment to fiscal consolidation in the EU.

The new framework believes in incentives, additional public expenditure, to finance reforms that will increase potential output and eventually the tax base and thus, at long last, reduce the deficit. Carrots that come in lieu of sticks, sanctions, given that past experience has evidenced the absence of political will and legitimacy to imposes the existing penalties in the Union. In my view, although clearly not that of the author nor of the majority of European policy makers, this is a fundamental misconception, sheer wishful thinking, that lies at the basis of the implementation problems. The European Union has failed to address the historically high levels of public debt and has been constantly searching for arguments to avoid the necessary fiscal consolidation. Arguments that included the secular declining trend in the natural rate of interest and the irrelevant cost of deficit and debt, the digital and energy transitions, and now the immediate needs in defense, and ageing-related expenditures. Of course, all these arguments are valid. But the budget constrain remains, and the need to make room by reducing other public expenditure programs is evident, although silenced. Effective tax rates are already high in the Union, certainly in comparison with our competitors, and they are impacting on productivity and potential growth. The real European problem is not what additional room does the new fiscal framework allow for the deficit, as public discussion would lead us to believe, but how much are investors, both domestic and foreign, willing to finance and at what costs. As both the UK and the USA have recently uncomfortably discovered.

The economic and social problems in core countries of the Union are well known and could complicate the European outlook. Therefore, in chapter 5, **Isabelle Mateos y Lago** asks *Are France and Germany the sick men of Europe*? Despite remaining peerless and unchallenged in the EU in terms of dominant economic size and political clout, France and Germany have been facing economic, social and political challenges at least since the pandemic. They have both underperformed across several fronts since 2019. GDP growth, particularly in Germany, has been well below EU average. Poverty increased in both countries. Productivity growth has been particularly weak in France. Germany has suffered higher inflation, France higher unemployment. The growth potential of both countries has weakened markedly and is now estimated to be marginally above 1% in France and only around 0.5% in Germany.

But for Mateos y Lagos, France and Germany retain strong economic foundations and high living standards that should ensure their continued economic dominance within the EU. Roughly 50% in population of the EMU and over 1/3 of the EU, France and Germany dominate the European large corporate landscape, together accounting for 2/3 of the companies listed on the EUROSTOXX 50. They have large, healthy and well capitalized banking systems, particularly France, since in Germany, largely public, regional, and mutual banks dominate the domestic market and are less transparent although enjoy an implicit state guarantee.

Germany, is an outlier among the most advanced economies, having remained an industrial powerhouse and a dominant exporter of goods in recent decades. It has generated steady large current account surpluses, and at 18.3%, its employment share in manufacturing is the highest in the G7 (tied with Italy). True, France and Germany are both afflicted with adverse demographics, but this is a European problem.

Against this relative strengths, this chapter identifies three main challenges for Germany: (i) a high exposure to global trade shocks; (ii) an energy-intensive, medium-tech heavy economic structure, combined with a fossil-fuels heavy energy mix; and (iii) a depleted public capital stock. The German economy has historically been very dependent on exports and it also has a relatively high exposure to trade with the US, making it vulnerable to a tariff war. Germany suffered disproportionately from the energy price hike in 2022 because of its high dependence on fossil-fuels, particularly from Russia. The German economy relies heavily on energy-intensive industries and in the automobile sector “is in a league of its own”. Moreover, since the 1990s, public investment has been barely sufficient to offset depreciation. This is likely to have played a significant part in Germany’s weak productivity growth and decaying growth potential.

Mateos y Lago maintains that the winds have started to turn more favorable and more dramatic changes lie ahead. The 2022 terms of trade shock has largely been absorbed. The investment plan approved by the new governing coalition elected in March 2025, made possible by a constitutional reform of the “debt brake”, is set to be a game-changer. This plan provides for EUR 500 bn to be invested in infrastructure over the next 12 years, plus at least another EUR 500 bn in defense. She estimates that German GDP could be 1.5% higher by end 2029 and up to 2.5% higher by 2035. The potential inflationary effects are expected to be limited. And thanks to a relatively low initial debt to GDP ratio, and the productivity enhancing impact of the announced reforms, Germany should be able to finance this investment surge without meaningful crowding out effects, and limit the debt to GDP ratio to 70%.

Overall, an optimistic assessment of the German outlook based on political confidence on the new government, positive economic dynamics once the terms of trade energy shock has largely been absorbed, and strong implementation of broad and ambitious structural reforms. Because on current policies, the debt to GDP ratio would rise to about 100% of GDP in 10 years. There remains however a lingering doubt about the capacity of Germany to reinvent itself away from a sectoral specialization that is incompatible with its energy and climate policies. The question remains what will give in first.

France's economy has real structural strengths. Unlike Germany, France suffered severe de-industrialization in the last two decades, but what is left of it (17% of GDP, roughly 10 pp below 2000) is highly competitive and high value-added (luxury, pharma, aeronautics). Moreover, France has a strong and vibrant service sector, which reduces France's vulnerability to trade wars. France also benefits from low cost of energy thanks to early investment in nuclear power.

However, France's problems are mainly fiscal, hence technically easier but politically entrenched. France is the only large country in the EU that hasn't managed to rein in its public debt to GDP ratio or its fiscal deficit in the post-pandemic period. In fact, the deficit increased significantly in 2023 and 2024, due to a decline in tax revenue in terms of GDP and a public expenditure that remains above its pre-COVID level. As a result, the public debt to GDP ratio returned to its 2021 level (113% of GDP) in 2024, while it declined elsewhere in Europe. It is not obvious how France is to address fiscal consolidation in the current political impasse and with high taxation levels that already hurt potential growth. A particular challenge is that France's employment rate remains relatively low particularly among the youth and seniors, and it has a significant proportion of NEETs (not in education, employment or training).

But Mateos y Lago, believes fiscal consolidation albeit gradual has already started. The 2025 budget should reduce the deficit from 5.8% to 5.4% of GDP. To reach the government's target (3% of GDP in public deficit in 2029) an adjustment of 0.5 percentage points of GDP would be necessary per year, i.e. a primary effort of 1 percentage point of GDP per year (taking into account additional interest payments and military spending). Of course, there is always a risk that unforeseen factors could complicate this pace of consolidation. The country's track record in delivering pension reform is dismal and does not invite confidence. And French politics have been a complicating factor since last year's dissolution of Parliament. But Mateos y Lago argues that the seriousness of the problem should not be overestimated. Could we see a "Liz Truss moment" in France? No, since there is wide consensus across political forces, and public opinion, that fiscal consolidation is needed.

Finally, this chapter turns to the implications for Europe of the situation in its two larger economies. Bund yields have risen and are set to rise further as a result both of higher issuance volumes and higher growth expectations. While this trend will also affect other European countries, spreads with other member states should narrow slightly, particularly for those showing progress in consolidating their public finances. Spreads could be further contained by new recourse to joint borrowing alongside national one to finance defense efforts. Germany's rearmament carried out through a national initiative does not necessarily hinder the pursuit of joint projects at the European level. From the French perspective, the more European public goods can be financed at EU level, the easier it will be to reconcile its own fiscal consolidation needs with its undaunted aspiration to strengthen European sovereignty.

That said, it could be argued that a sovereign debt crisis in France would be seen to threaten the existence of the euro itself and as such might lead to capital outflows from the EZ at large. This is very much a gray swan in the author's view, and a far more likely scenario is that as the EZ's two largest economies regain health and dynamism, more global capital is drawn into the region, and the euro appreciates as a result.

2.3. FINANCIAL SUPERVISION AND REGULATION, INTERNATIONAL COMPETITIVENESS AND A LEVEL PLAYING FIELD.

The yearbook then moves to issues on financial regulation, focusing on two basic questions: simplification and harmonization of rules and developments in digital finance. In chapter 6, **Santiago Fernández de Lis** looks inside *The EU financial sector: competitiveness, simplicity and deregulation.* He begins by discussing the historical context of financial regulation, noting that regulatory cycles often follow financial crises. The current phase of regulatory tightening, fully understandable after the Great Financial Crisis of the late 2000s, has lasted over 15 years. As a side effect, it has resulted in a rechanneling of financial flows to non-bank financial intermediaries, including some segments that are little or not regulated at all, like private capital and crypto assets. It is still unclear if and when the new phase of deregulation will materialize. But it could easily be triggered by Trump's second presidency. At the same time, the EU is embarked in a simplification path in financial regulation, purposedly to enhance efficiency and economic growth. A point underlined in the Draghi and Letta reports, and which goes pari passu with the Savings and Investment Union, the new marketing name for the unsuccessful Capital Markets Union.

This chapter argues that fragmentation is probably the single most important factor in explaining EU banks underperformance, as compared to US banks, together with environmental and structural factors, but regulation also plays a role. After comparing financial regulation both sides of the Atlantic in different fields -prudential supervision, the approach to risk weighted assets, consumer protection, payments, privacy laws, cybersecurity, operational issues, and anti-money laundering - Fernández de Lis concludes that overall, "the EU regulation is probably harsher for banks", despite the Basel Committee considering the EU "materially noncompliant" while the USA is so far "largely compliant". But one should not forget that contrary to the EU, the US only applies Basel to very large, internationally active banks. Fragmentation and regulation result in no EU bank and five US banks in the list of the ten biggest banks in the world by market capitalization.

Complexity is embedded in the EU multi-layered governance system, which needs detailed and binding rules to prevent regulatory arbitrage from Member states inside the Single market. This chapter argues that the EU regulatory activism (especially in new fields) is mainly attributable to the EU Commission push to avoid inconsistent national regulations. This is so, because the EU feels the need to reign in national institution but has no direct authority over them. While the Banking Union required the creation of new institutions at the EU level, no national institution has been closed or discontinued, thus multiplying the possibilities of overlapping competencies and turf battles. Moreover, I would argue that most of these national institutions have increased in size, both in terms of budgetary allocations and staff, at a time when many of their core roles have been transferred to new EU institutions.

The EU strategy has consisted in setting up single purpose institutions, agencies with a single concrete task: microprudential, macroprudential, conduct, resolution, consumer protection, payments systems, deposit insurance… New regulatory and supervisory agencies with narrow mandates that often cross paths and compete in terms of orthodoxy and reporting requirements, thus creating uncertainty on the part of financial institutions. Furthermore, as these institutions are still in the process of establishing their credentials and scope of action, their actions tend to show a restrictive bias. This proliferation complicates coordination, creates uncertainty and multiplies compliance costs for supervised entities.

In the rethinking of the EU financial architecture, and in redrafting the mandate of some of these agencies, Fernández de Lis argues that the EU would benefit from an explicit inclusion of competitiveness objectives in the mandates of some agencies, in particular the Single Supervision Mechanism (SSM), in line with the recent UK reform, and from a strengthened accountability of the agencies. The line of argument is straight forward, competitiveness is a necessary condition for a solvent, solid, stable and sustainable financial system. Only a competitive financial system can also be stable.

In stressing the need for increasing accountability, Fernández de Lis drops the idea that "the SSM has inherited the independence of the ECB, in what is probably an excessive interpretation of the Treaty". And he adds, the rationale of extending this independence to banking supervisions is not obvious. Beyond its alleged weak legal foundation, on which I am not competent to comment, it seems to me that the independence of the Supervisor is particularly relevant. And for the same reasons and at the same conceptual level than monetary policy. The temptation to use supervisory practices for political gain is just as globally pervasive as the use of inflation. Evidence of politically induced banking crisis, of supervision looking sideways under instructions, of politically or friendly motivated credit bubbles resulting in stability problems, should be too close in our Spanish memory at least, to give up on strengthening the independence of supervisors. A different issue altogether, and one in which I fully concur with the author, is that accountability is the other side of independence. And it should lead independent monetary and financial agencies to stick strictly to its mandate and resist any temptation to overreach.

This chapter also discusses the EU's proactive approach to regulating new industries and technologies, such as the General Data Protection Regulation (GDPR) and the Digital Markets Act (DMA). It highlights concerns about the lack of European digital champions and suggests that excessive regulation may be a limiting factor, but causality may well run in the other direction, "the fact that the EU has fewer BigTech's may explain its more restrictive regulation and antitrust polices." A sort of size-regulation doom loop, a trap that enforces itself into a suboptimal equilibrium.

While this chapter welcomes the current EU simplification drive in financial regulation, it argues for greater ambition. It should extend beyond the current focus on the climate change area and simplification of SMEs reporting. To this effect, the impact analysis of regulations should be strengthened, putting more clearly the burden of the proof on the need to regulate. In this avenue, Fernández de Lis underlines certain trade-offs that need to be avoided: (i) less EU regulation should not be achieved in exchange for more national regulation, (ii) Less Level 1 regulation should not lead to more Level 2 regulation, and (iii) less regulation in exchange for more supervision is not a good idea since in the EU, supervision shows a more restrictive bias than regulation.

The chapter concludes with a list of specific proposals to streamline regulation, strengthen institutional accountability, and promote efficiency. I would not repeat them here, but I would encourage the interested reader to study them carefully in the chapter. They constitute an interesting roadmap for a more solid, stable and competitive European financial system.

Next, in chapter 7, **Rebecca Christie** puts regulation in international perspective and writes, *Basel under siege. Is the end in sight for global cooperation in financial rules?* She discusses the impact of U.S. President Donald Trump's policies on global financial cooperation, particularly focusing on the Basel capital standards. Since retaking office in 2025, Trump has taken several actions that challenge international cooperation, such as withdrawing from the World Health Organization and the Paris Agreement and considering pulling back from the World Bank and the IMF. Consequently, the concern about the future US role in international economic and financial coordination is running high. It would seem, however, judging from the last public speeches of secretary of Treasure Scott Bessent, that the current thinking has moved from abandoning these institutions to exert enormous pressures on them to pull back on its expansion and to force a significant retrenchment to its basic mandate. Will they do the same in Basel? And most importantly, because of competitiveness considerations, will that withdrawal lead to a worrisome race to the bottom in financial regulation? This chapter argues that the slow and technical nature of international financial architecture will help withstand major political pressures and avoid that major risk.

The result of long historical processes and many banking crisis, the international architecture for financial coordination is not straightforward. The Basel Committee on Banking Supervision, the Financial Stability Board and the Bank for International Settlements, each one with its own mandate, composition and institutional status, play a crucial role in setting and monitoring global banking standards. It is worth emphasizing that these standards are guidelines and not mandatory requirements. The so called Basel capital rules were originally agreed in the Basel Accord of 1988 and have suffered almost constant revisions. The original basic rule, the minimum capital ratio to risk-weighted assets of 8%, was set then.

Overtime the framework has evolved beyond credit risk to include market, counterparty and operational risks. Basel II introduced the concept of the three pillars, minimum capital requirements, supervisory review, and market discipline. It was also designed to apply only to large international active banks, the rest remaining subject to Basel I, to the simple 8% ratio. As of 2009, Basel 2.5 sought to prevent banks from moving troubled assets from their banking book to their trading book. As a result of the great financial crisis, Basel 3 was approved and the long road to implementation started. In essence, it calls for more and better capital and better liquidity management. It introduced concepts like the Countercyclical Buffer, the Leverage ratio, the Output floor, and the Net Stable Funding and Liquidity Coverage Ratio.

But Basel rules are not enforceable and need to be translated into national legislation. In this process, all major jurisdictions, and significantly the US and Europe, introduce their own qualifications, national priorities and political considerations. This is what makes comparing actual banking regulation so difficult, and transparency suffers, especially for non-listed banks.

In broad terms, EU and US capital requirements for banks are roughly equivalent. But they differ significantly once we adopt a more granular view of banks by size and business models. European regulatory demands are higher for small and medium size banks, as these banks' lending models are inherently less risky. But large and internationally European banks tend to face less requirements than their American counterparts, given their lesser specialization in investment banking activities. European banks are concerned about U.S. deregulation potentially putting them at a disadvantage, leading to calls for slower implementation of the next round of Basel rules, specially after the UK has decided to postpone its main component, the FRTB, the fundamental review of the trading book. The EU Commission has called for a postponement, but Rebecca Christie does not find any additional delay advisable.

In any case, bank capital itself does not move in lockstep with agreed rules. Market pressures, investors preferences, institutional goals and priorities, risk appetite, and supervisory expectations and moral authority, all influence the final outcome. In fact, European and American banks keep their capital and liquidity positions well above regulatory requirements. This so-called management buffer is a key indicator to assess the solvency of any institution, the state of the industry, and the stability of financial markets. And it would be appropriate to consider this buffer when modifying the rules. The increase in the mandatory capital buffer may only result in a reduction of the management buffer, in larger control by the regulator.

In closing, Christie argues that because banks have historically provided more than two thirds of European corporate financing, and regardless of whatever the Trump administration finally decides, European regulators have a big incentive to push ahead with full implementation of the Basel endgame without delay. In her rationale, if US banks were to face dramatically lower requirements, the global financial system would become riskier, thus giving EU regulators an additional argument. A proposition that totally ignores the previous calls for placing competitiveness at the heart of financial regulation, as the alert reader must have realized. Because this is in fact, an area of growing discussion and disagreement in Europe. In my view, as I already elaborated in the previous edition of the Yearbook, the time is ripe to pause the regulatory tsunami in banking, apply more decisively the proportionality criteria, focus on regulating non-banks financial intermediaries, NBFI, and foster the competitiveness of the European financial industry.

2.4. THE DIGITALIZATION OF FINANCES, PUBLIC AND PRIVATE DIGITAL ASSETS.

The last section of the Yearbook is about digital finances. In Chapter 8, Fernando **Navarrete** asks the question, *Do we really need the digital euro: a solution to what problem exactly?* He discusses the necessity, proportionality, and strategic coherence of the Digital Euro project within the broader context of the current geopolitical and financial landscape.

The Global Financial Crisis greatly damaged the credibility of money, banks and central banks and prompted monetary authorities to explore Central Bank Digital Currencies (CBDCs) as a means to regain public trust. But Navarete argues that a better strategy should concentrate on providing better policy outcomes from the fiat money and private financial intermediation system. His methodological approach lies on the basic economic concept of the opportunity costs.

This chapter emphasizes that while wholesale CBDCs can enhance the efficiency of wholesale payments and international transactions, retail CBDCs, like the proposed Digital Euro, pose significant risks to financial stability and privacy. Consequently, he favors the ECB to shift priorities and press decisively ahead with the exploration of wholesale CBCD initiatives. A development that does not need any complex institutional or legal shake-up as their development falls naturally within the traditional remit of Central Banks to provide back end payments infrastructure.

But the digital euro is a different animal, a new form of digital money issued by the ECB that represents a direct liability to its balance sheet, just like cash. The inherent physical inconvenience of cash has left the brunt of the store of value function of money to "commercial bank money", bank deposits. The modern digital nature of these bank accounts has made them the backbone of digital payments. Therefore, retail CBDCs are inherently destabilizing for the current banking ecosystem because of the potential erosion of its deposit base. This fact is precisely what some of the more radical proponents of a digital euro perceive as a plus. Those who would want CBs to hold all the liabilities of the financial system, and those who see it as an opportunity to return to a mystified world of private money. To prevent both unwanted consequences, the current digital euro proposal "imposes untested, unproven, and somewhat arbitrary exogeneous limitations in the form of how many digital euros any citizen can hold at any point in time." And Navarrete adds that it is essentially a political question whether these limits would hold in a crisis, whether they would prevent a large portion of the population seeking for a safe refuge for their savings. This politization of monetary instruments creates new risks to central bank independence.

The other consubstantial problem with retail CBDCs is their limited privacy compared to cash. And privacy is the foremost concern among EU citizens when considering a digital currency. The mere perception of surveillance erodes trust and may drive consumers back to informal or unregulated payment channels. This a political challenge. Data retention periods, access protocols, and oversight mechanism are not technical matters, but constitute societal choices that require democratic accountability, and transparent legislative mandates.

After reviewing risks in retail CBDCs, its potential costs, the chapter assesses potential benefits. Reducing CB anxiety about the erosion of seigniorage income, a silent levy, cannot be considered a benefit, since it certainly does not impact citizens welfare but only CB's profit and loss statements. Other, fairer, arguments to defend the digital euro have expanded well beyond the initial narrative to now include: (i) the secular reduction of the monetary base, the so called high powered money, with the declining use of cash which may lead to the loss of the monetary anchor and complicate monetary policy; (ii) digital sovereignty and strategic autonomy in the payment system; and (iii) the need to avoid monetary substitution due to the success of non-euro denominated stable coins. The underlying narrative has moved to more proactive ambition, create the European world of finance.

But Navarrete argues that the more problems the digital euro pretends to solve the less credible its claims. First, the declining relative prevalence of cash is at least a century old problem. Why is it now a problem? Is there a threshold that has been surpassed, a "tipping point"? If so, why only in Europe since no other major financial jurisdiction seems to be keen in developing its CBDC. The US Fed has abandoned the project well before the Trump administration, the UK, Australia and Canada as well. Only China, and for reasons that we would do better not to replicate, sticks to the original program.

Incidentally, the "unicity of money" is not only underpinned by the capacity to move commercial bank money into cash at par. It is fundamentally based on the capacity of every citizen to move their deposits at par from one bank to another. Reserves at the CB guarantee not just interbank settlements or the unicity of money, but also the capacity of the public monetary authority to steer monetary policy. A private ecosystem of innovative payment service providers, infrastructure developers, technical standards, etc. has emerged in recent decades. Should the Central Bank push back to reverse, stop or moderate this trend?

Second, with the Trump administration digital autonomy has come to the forefront of the European political debate. It is a fact that in the field of payments the EU remains structurally dependent on non-EU players. As in many other technological or security fields. A political consideration that Navarrete emphasizes, but which I find misguided. To put it bluntly, I fail to see why the Trump administration would want to intervene American Express or Visa to control Europe and not go all the way to manipulate Microsoft Windows or MacOS or IOS. In any case, as this chapter rightly argues, the root of EU vulnerability is not the absence of a digital euro, but the continued fragmentation of the European payments landscape. And for that to be remedied, other political initiatives seem much more promising and necessary.

Achieving payments autonomy may be more effectively pursued through a combination of regulatory clarity, support for European payments initiatives and the promotion of inter-operability and scale in private sector solutions based on commercial bank money. The goal should not be to replace existing global providers of payment services, but to complement them and be ready to substitute them if geopolitical risks materialize. Since private providers are not prioritizing offline solutions, a pure digital wallet, this is a niche where public intervention may be justified, and the ECB could implement.

Third, as for the risks of monetary substitution with the proliferation of crypto assets, the reality today is that stable coins serve mainly as platforms between the crypto world and the traditional fiat money financial system. And there are no indications that they are prepared to serve as full scale means of payments. If anything, they are becoming popular in countries where the population at large has lost confidence in the local currency, which is certainly not the case of the Euro area. They may be more of an alternative to dollarization, and therefore a potential problem in neighboring countries that may use them for euroization. This risk would only be exacerbated were the Euro Area to decide issuing digital euros.

A fourth and related final argument in favor of the digital euro is that it may increase the international role of the euro. An overplayed claim. Retail payments are only marginal drivers of international capital flows, which are mainly determined by the depth and liquidity of financial markets, the credibility of its institutions, political and military considerations, and sheer inertia.

Navarrete concludes his chapter underlining "the striking disconnect between the challenges identified by the ECB and the Commission and the capacity of the digital euro to effectively address them." Furthermore, the proposal raises critical concerns related to democratic legitimacy, market dynamics, the structure of financial intermediation, consumer protection and long term innovative capacity. It is a first order financial policy instrument that changes the way money is created, distributed and used. And incidentally, the minor issue of who bears the cost is unresolved. For these reasons, "the decision to issue a retail CBDC cannot rest within the Eurosystem alone". And not surprisingly given his current position he concludes, "Legislative co-decision by the European Parliament and the Council is essential."

A more balanced approach that leverages private-sector innovation and focuses on wholesale CBDCs may be more effective in achieving the desired outcomes. And Navarrete defines an alternative plan forward which I would urge the interested reader to study before jumping to any conclusion and being dragged in a popular digital euro wave.

The yearbook ends with **Carolina Albuerne** asking in chapter 9, whether *Regulating the rise in digital finance though DORA will open another transatlantic divide*. Since the Global Financial Crisis, the prudential requirements applicable to regulated institutions, particularly to banks, have sharply increased. In this context, the Digital Operational Resilience Act (DORA[3]) has been a new step ahead in expanding the extent and perimeter of prudential regulation to ICT risks. First, by harmonizing the standards on ICT risk management applicable to all EU financial entities. And second, by establishing a new prudential supervisory framework for certain "critical" ICT third-party service providers (TPSP), based on the extent and scope of their support for the critical or important functions of EU financial entities. Many rules set out by DORA were already in force through recommendations, guidelines and other standards for most financial entities. But their relevance comes from their binding nature, as they are set out by European regulation and, therefore, directly applicable to EU financial entities.

Authorities have issued standards on third-party risk management, with the overarching goal that the internal controls for outsourced activities are equivalent to those applied to non-outsourced activities by the regulated entity. The regulated entity remains accountable for the outsourced activities, and contracts with third parties must acknowledge the supervisor's ability to access the outsourced activity to maintain adherence to the same prudential oversight regime. It must be noted however that DORA's rules on third-party risk management only cover ICT services. DORA's rules are not directly applicable to other non-ICT third party services, that could be also very relevant in the business model of financial entities, including administrative, payment or other non-ICT services.

Financial entities are in principle free to decide whether to outsource or not their ICT services, including when the outsourcing affects or can affect the provision of critical or important services. They are "only" required to apply sound standards and procedures before agreeing to any ICT outsourcing. Financial entities should keep a comprehensive register of all their contractual arrangements with third party service providers for ICT services, distinguishing among those that support critical or important functions and those that do not. DORA is very demanding with the involvement of the financial entity's internal audit services in the review of ICT risks, and in ensuring access to the premises, information, and data managed by the service provider. It also requires financial entities to include in the contract clauses that require the TPSP to cooperate with the supervisor and the resolution authority, termination rights in favor of the financial entity, and those that thoroughly regulate the location where the service is provided and include rigorous provisions on data security.

The legislator is also aware that the concentration of the financial system in a few service providers can have systemic consequences. In response, the European Union has adopted a policy seeking to expand the prudential supervision perimeter beyond financial organizations, covering unregulated ICT TPSP. The regime is largely unprecedented, and it creates obligations for TPSP to submit information, surrender to onsite or offsite inspections and respond to the recommendations issued by the relevant Eu-

[3] Regulation (EU) 2022/2554 of the European Parliament and the Council of 14 December 2022 on digital operational resilience for the financial sector and amending regulations (EC) No 1060/2009, (EU) No 680/2014, (EU) No 909/2014, and (EU) 2016/2011.

ropean authorities. This framework goes well beyond the existent regime in the United States, where the Bank Services Companies Act (BCSA).[4]

After discussing the rationale of the DORA regime, Carolina Albuerne answers different questions of the new European regime: (i) which ICT TPSPs will be subject to the oversight regime?, (ii) who will be the lead supervisor of these entities?, (iii) which powers does the lead supervisor have?, and (iv) how should the powers over institutions that are based in third countries outside of the European Union be exercised?

Only service providers that can have a serious impact on the EU financial stability will be identified as critical, based on the following criteria: (i) the systemic impact on stability, continuity or quality in the provision of financial services if the ICT TPSP faces a large-scale operational failure; (ii) the systemic relevance of the financial entities relying on the services provided by the ICT TPSP, and (iii) the reliance on the TPSP by financial entities for performing their critical or important services. DORA requires ICT TPSP considered "critical" to have at least one subsidiary in the European Union to render services to EU financial entities.

The oversight framework does not require critical TPSP to be licensed, and therefore a third-party service provider does not need to undergo any authorization process before starting the provision of critical or important services to a financial entity in the European Union. Nor will its directors or senior managers be required to be subject to a fit and proper assessment. In other words, providing critical services to a regulated entity in the European Union is not a reserved activity, but it may trigger some prudential supervision. DORA gives the Lead Overseer information and inspection powers.

The authority will be able to conduct onsite inspections on any business premises of the service provider. The Lead Overseer will be assisted by a joint examination team to conduct inspections and other supervisory actions, in a structure that seems inspired by the Single Supervisory Mechanism's joint supervisory teams. DORA gives the Lead Overseer the power to issue requirements and recommendations on certain areas of activity of the critical ICT TPSP, and in the event of non-compliance, it may impose sanctions. The Lead Overseer may also issue recommendations to the critical service provider on refraining from entering into a further subcontracting agreement in cases where subcontracting may involve critical or important functions to the financial entities and the subcontracting party is located in a third country and the arrangement poses a clear and serious risk to the financial stability of the Union or to the served financial entities.

[4] There are material differences between the European (DORA) and American (BSCA) frameworks. First, the scope of BSCA covers only banks (not even all deposit-taking entities in the US), whereas DORA covers most financial institutions in the EU. The covered services by DORA are exclusively ICT, whereas BSCA's scope is broader, covering mainly all services rendered by third-parties to banks, including others such as payment or lending services. Second, a critical difference is that enforcement provisions are very clear in DORA, whereas in BSCA are lacking, what significantly weakens the position of the supervisors, and makes oversight dependent on an entity willingness to cooperate. Third, DORA includes provisions that ensure that the public can know which are the critical third-party service providers that are subject to the oversight regime, as they will be disclosed, whereas BSCA does not include any provision on disclosing these elements. Overall, DORA is a much more ambitious approach to a narrower universe than BSCA.

The recommendations issued by the Lead Overseer are not binding. Nonetheless, DORA contains different mechanisms of "moral suasion" and foresees that as a last resort, the competent authority (for instance, the banking supervisor for a bank) can force the financial entity to temporarily suspend or to terminate the use of the services of the ICT TPSP. This will be close to a "nuclear option" and may have huge business and reputational effects for the third-party service provider.

DORA also enables the Lead Overseer to exercise its powers (mainly information requirements and the power to conduct general investigations and inspections) outside of the European Union, on a subsidiarity basis when the objectives of the supervision regime cannot be achieved by applying them to the European subsidiary critical TPSP, for instance, if the TPSP manages or processes data in that country. It is not clear whether the critical TPSP and the relevant authorities in the third country would authorize an inspection or any other supervisory activity in the service provider's premises in that country.

The oversight framework set by DORA is new and unprecedented; and its main elements must be tested. For instance, the ESAs are yet to make the first designation of critical providers. Similarly, there are still unresolved issues regarding the organization of prudential supervision. In any event, European financial entities may have yet another source of regulatory costs that other international competitors -notably financial entities from the United States of America are not subject to. When it comes to the provision of ICT TPSP, EU financial entities will incur significant costs related to the amendment of contracts, the maintenance of a centralized register with all the data points for the covered contracts, etc. They may also face an increase in their operating costs, as TPSP may pass the costs of compliance through them. Depending on how ESAs decide to use their newly granted powers, EU financial entities may face higher costs linked to their operational models, that can affect their competitiveness in international markets and, in some cases, may also dent their ability to innovate.

3. CONCLUDING REMARKS AND TEN NEW LESSONS FOR EUROPE

Once again, this year, I will conclude my executive summary with ten lessons for the European Monetary Union. Lessons that summarize, in my own words, my interpretation of what the authors recommend in each one of the ten chapters of this book.

i. The European Union needs to make real the abstract concept of open strategic autonomy without falling into outright protectionism. It needs to preserve the special Atlantic relationship despite the current USA administration and to avoid and all out trade war. Unilateral trade liberalization is a preferred second best.

ii. Europe faces slower productivity growth due to lower investments in R&D and technology adoption and excessive regulation in goods, services and labor markets. Two structural trends will condition productivity and economic growth in the next decades, the development and adoption of technologies associated to robotics and artificial intelligence, and demographics. Europe lags behind in both accounts.

iii. The monetary policy framework adopted by the ECB in 2021 was instrumental in bringing inflation down. Nevertheless, this framework should be reviewed in 2025, by (i) emphasizing measures of underlying inflation and monitoring wages and mark-ups, as these indicators filter out short-term volatility in headline inflation; (ii) the symmetry in the need for forceful action in both deflationary and inflationary contexts; (iii) robustness to different scenarios, with improved communication of the alternative potential outcomes; and (iv) the need for sustainable fiscal policies as a precondition for a well-functioning European Monetary Union.

iv. The European Union has failed to address the historically high levels of public debt and has been searching for arguments to avoid the necessary fiscal consolidation. Recently, these arguments were the secular declining trend in the natural rate of interest and the irrelevant cost of deficit and debt, the digital and energy transitions, the immediate needs in defense, and ageing-related expenditures. Of course, all these arguments are valid. But the budget constrain remains, and the need to make room by reducing other public expenditure programs is evident. Effective tax rates are already high in the Union, and they impact productivity and potential growth. The European fiscal problem is not what additional room does the new fiscal framework allow for the deficit, as public discussion would lead us to believe, but how much are investors, both domestic and foreign, willing to finance and at what costs, in an uncertain and fractured world.

v. Germany faces three main economic challenges: (i) a high exposure to global trade shocks; (ii) an energy-intensive, medium-tech heavy economic structure, combined with a fossil-fuels heavy energy mix; and (iii) a depleted public capital stock. France is the only large country in the EU that hasn't managed to rein in its public debt to GDP ratio or its fiscal deficit in the post-pandemic period. His fiscal economic problems are technically easy but politically entrenched. The EU needs both countries politically stable and economically strong. The Union cannot survive without both of them functioning efficiently and leading the federalization drive.

vi. Excessive complexity is embedded in the EU multi-layered financial governance system, which needs detailed and binding rules to prevent regulatory arbitrage from Member states inside the Single market. Furthermore, while no national regulatory or supervisory institution has been dissolved, the EU has created multiple single purpose agencies: microprudential, macroprudential, conduct, resolution, consumer protection, payments systems, deposit insurance. This proliferation complicates coordination, creates uncertainty and multiplies compliance costs for supervised entities. In the rethinking of its financial architecture, and in redrafting the mandate of some of these agencies, the EU would benefit from an explicit inclusion of competitiveness objectives in their mandates and from putting more clearly the burden of the proof on the need to regulate.

vii. Although there is much concern about the future of international economic and financial coordination, it is likely that the slow and technical nature of international financial architecture will help it withstand major political pressures and avoid the risk of unilateralism in financial regulation. In any case, bank capital itself does not move in lockstep with agreed rules. Market pressures, investors preferences, institutional goals and priorities, risk appetite, and supervisory expectations and moral authority, all influence the final outcome. Therefore, regardless of Trump's decisions, it is unlikely that a race to the bottom in financial regulation may actually occur, but EU policy makers should nurture a level playing field.

viii. The digital euro raises raises critical concerns related to democratic legitimacy, market dynamics, the structure of financial intermediation, consumer protection and long term innovative capacity. Retail CBDCs are inherently destabilizing for the current banking ecosystem because of the potential erosion of its deposit base. The other consubstantial problem with retail CBDCs is their reduce privacy compared to cash. Potential benefits include preserving seigniorage, a silent and hidden levy, avoiding the potential loss of the monetary anchor, digital sovereignty and strategic autonomy in the payment system; and preventing monetary substitution to non-euro denominated stable coins. There is a however, a striking disconnect between the challenges identified by the ECB and the Commission and the capacity of the digital euro to address them. A more balanced approach that leverages private-sector innovation and focuses on wholesale CBDCs may be more effective in achieving the desired outcomes. The Digital Euro project, as currently proposed, may not be the optimal solution for addressing these challenges.

ix. The scope of application of DORA is very broad, as its main goal is to harmonize the standards for management ICT risks across the financial system. The oversight framework set by DORA is new and unprecedented; and its main elements must be tested. There are still unresolved issues regarding the organization of prudential supervision. In any case, European financial entities may have yet another source of regulatory costs that other international competitors notably financial entities from the USA, are not subject to. When it comes to the provision of ICT TPSP, EU financial entities will incur significant costs related to the amendment of contracts, the maintenance of a centralized register with all the data points for the covered contracts, etc. They may also face an increase in their operating costs.

x. As a final and personal note, current events demonstrate that in a fractured world, the European Union is more needed than ever. It is real time proof that political and economic cooperation benefits all participants and promotes social and economic development. But the challenges ahead are significant and the EU would need to adapt by changing its decision making processes, redrafting the distribution of competencies between the Union, federal institutions, and national governments and moving forward in the transfer of sovereignty in certain areas, with the view of eventually arriving at a new Treaty.

1. EUROPEANS IN A WORLD OF DYSFUNCTIONAL SUPERPOWERS

José M. de Areilza Carvajal[1]

1. INTRODUCTION

Russia's invasion of Eastern Ukraine and the beginning of Donald Trump's second term in office have ended a long era in international relations and awakened Europeans to a different international reality. It is a shift from a world organised through multilateral rules and institutions, with all its imperfections and limitations, to one that is divided and fraught with uncertainties. We have entered a new era of rivalries, which Philip Stephens describes as "the end of the end of history".

Some elements that define this more unstable situation are the rise of China, the retreat of the United States, compatible with certain imperialist impulses, the growth of threats such as cyber-war or climate emergency, and the persistence of other threats that have been present for years (nuclear proliferation, pandemics, international terrorism and uncontrolled migrations).

The goal of global prosperity, central during the years of Pax Americana that followed the fall of the Berlin Wall, has given way to a growing imperative of security, understood in national or regional terms.

Perhaps it is too late to adapt the geopolitical order that emerged from the Second World War. The distribution of power in international organisations is outdated. The UN Security Council, the International Monetary Fund or the World Bank have a representativeness problem that they have not yet managed to address. Ongoing wars, from Ukraine to Gaza, moreover, accelerate the march of history. José Pardo de Santayana explains this in a recent analysis:

[1] Secretary General of the Aspen Institute España, Professor and Jean Monnet Chair at ESADE Business School and Editor-in-Chief of the journal "Política Exterior".

> "War has returned to the very centre of international relations. The nuclear weapon has regained its lost prominence, and Europe lives under the threat of a worrying escalation. Wars in Ukraine and the Middle East have put the final nail in the coffin of the US-led international order, alienated the Global South from Western leadership and are bringing the revisionist powers, China and Russia, closer into alignment with Iran and North Korea.
> Moreover, warfare is accelerating the exponential advances of certain technologies that, like a sorcerer's apprentice, could take on a life of their own and intensify the dynamics of warmongering."[2]

Once again, we are witnessing the confrontation between large blocs, this time the United States versus China. These are two systems that are understood to be incompatible with each other despite their great economic interdependence. This unstable scenario has been described as a new Cold War, quite different from the first.[3] This time most of southern hemisphere countries do not take either side, as the division into blocs leaves most countries as non-aligned. Some of them, the emerging powers, triangulate effectively, taking advantage of the benefits of multi-alignment and capitalising on the rivalry between the two poles. Such is the case of India, Saudi Arabia, Brazil, South Africa and the Emirates.

The term "geopolitics", which fell into disuse after the Second World War, has returned and is widely -and uncritically. used. Our words are our worlds, said Octavio Paz: we lack a predictable framework in international relations, and we watch as ambition for power, geography and history shake the foundations of the world order. International law is being devalued, the use or threat of force is becoming more present and an economic deglobalisation is beginning that we do not yet know to what heights of fragmentation it will take us. As Josep Piqué observed, geography is always there and history always returns.

The demand for security is also based on an concept that for some policy makers spills over from defence to energy, trade and investment, technology, health and migration. Interdependencies reinforced by a long process of economic globalisation are increasingly understood as vulnerabilities. The political debate in many democracies is shifting to the axis of open versus closed countries, leaving behind classic right-left ideological divisions. In many parts of the world, liberal democracies are no longer perceived as the result of an advanced process of political and social evolution, but as rather messy and inefficient governance systems. The leadership archetype of so-called "strongmen", saviour-like figures with simple solutions to complex problems, is in vogue in both democratic countries and autocracies.[4]

For Europeans, the return of this Donald Trump to power is bad news. Neither the EU nor its member states are prepared and cohesive enough to achieve the strategic

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[2] José Pardo de Santayana, "La Guerra ha vuelto con fuerza a la geopolítica", Panorama Estratégico 2025, Spanish Institute for Strategic Studies, Ministry of Defence, April 2025.

[3] See Sir Robin Niblett, *The New Cold War*, Atlantic Books, 2024.

[4] See Gideon Rachman, The age of the Strong-man, The Bodley Head, 2022

autonomy they need to cope with the weakening transatlantic relationship. Security, technology and energy dependence on the US is enormous and alternatives cannot be improvised quickly. The growing dysfunctionalities of the Washington administration seriously affect the old continent. The second presidency of this disruptive politician is a triple shock for the continent's defence, economy and democracy.

Russian aggression in Ukraine, a new step of Moscow's expansionism, is another factor of instability for Europe. The invading country seeks victory and not peace, once Trump has endorsed its revanchist theses. China's new steps towards global hegemony are facilitated by a chaotic approach to foreign policy coming from Washington, completing a highly complicated geopolitical picture.

The two alternatives being discussed in Brussels and European capitals are unrealistic. On the one hand, decoupling from the United States by acquiring its own defence capabilities and strengthening the European economy (EMU pending reforms, internal market, capital union, industrial policy, common strategy to compete in the digital revolution). These are part of the list of unfinished business and pending homework. Even if they are tackled now because of a geopolitical imperative, the European reaction will take a long time to bear fruit -around ten years for instance to build its own defence capacities. On the other hand, rapprochement with China, the other superpower, is on the cards. Yet this is, as we shall see, a move fraught with risks and counter-indications. Europeans must continue to seek accommodations and negotiate with Washington in spite of everything. The Trumpist nightmare may end long before the Chinese dystopia, even though the fight for the survival of liberal democracy will go on for many more years.

2. THE UNITED STATES AS A DISRUPTIVE SUPERPOWER

2.1. UNDERSTANDING TRUMPISM

At the centre of the geopolitical transformation is the United States. Former Defence Secretary Robert Gates warned in a seminal article in 2023 how the Western superpower is weighed down by dysfunctional and polarised politics. This situation is a serious obstacle to reaching the basic consensus that would allow it to respond effectively to a delicate international situation, with four autocracies that challenge it and are increasingly coordinated with each other: China, Russia, Iran and North Korea. [5]

With Donald Trump's return to power, the United States is sharpening its internal divisions and refusing to be a provider of global stability. It is leaving behind the reconstruction of foreign policy alliances, as Joe Biden had done during his only term in office, and is moving towards a foreign policy that oscillates between isolationism and a version of imperialism that takes us back to the 19th century.

To win the 2024 election, Trump has displayed remarkable political astuteness in weaving a broad coalition among voter groups with very different agendas: the MAGA

[5] Robert Gates, "The Dysfunctional Superpower", November-December 2023, *Foreign Affairs*.

movement, evangelicals, libertarians and many members of racial minorities. Trump should be grateful for the all-important help of the Democrats: he has won thanks to the invaluable collaboration of Joe Biden and Kamala Harris, the "royals" of an arrogant, wokist party disconnected from most non-college-educated voters. Abba Eban, Israel's minister for the EPA, said Palestinian negotiators "don't miss an opportunity to miss an opportunity", a phrase applicable to the Democrats.

Trump is a very misguided question to the very real questions of a large part of American society, about growing inequality, lack of social mobility, uncontrolled immigration, and other unspoken fears. In fact, after Trump there will still be Trumpism, a national-populist movement that has replaced the traditional conservative politics of the Republican party.

The New York tycoon has returned to the White House with a language of victimhood and aspires to quickly change the rules of the game, both of American democracy and of an international order largely built by the United States.

Trump's second presidency has begun so viciously that one almost misses his first term, when he did not have such clear plans and did not have a good grip on the levers of power. The president is putting democracy to the test, through the expansion and privatisation of executive power, attacks from the federal government on fundamental rights of immigrants, lawyers and universities (habeas corpus, representation rights, free speech), contempt for the Supreme Court and federal judges, and accelerating the destruction of a fragile but still rules-based international order.

Their project is to leap over consensus, pacts, norms and institutions, arguing that local and global elites are corrupt. Reform is not possible, and the only thing left is a break with the established order.

The most powerful presidential adviser at the start of the new cycle has been billionaire Elon Musk. On the one hand, this technologist, partly responsible for Trump's electoral success, has tried to maintain and increase the numerous contracts his companies have with the federal government and influence policy towards China, where he manufactures half of his cars. On the other hand, he has acted as the shadow mastermind of the Trump cabinet and fought on all fronts, from the reform of the administration to peace in Ukraine, the rules of the AI game or support for European ultra-right parties.

Anne Applebaum has argued that the Department of Government Efficiency entrusted to Elon Musk has nothing to do with efficiency: "What he is doing is terrorising people who work for the government and pushing them to resign and replace them with loyalists. Musk and his team of engineers are becoming stewards of the bureaucracy's data system. We don't know what they will do with it, whether they want to sell it or use it for their business".[6]

Trump cares about popularity and polls, like a good TV ratings expert. He also cares about macroeconomics, the stock market and the risk premium on treasury bonds, however much he conveys his own version of economic data. But the tycoon cannot run again in four years' time (in principle...), his hands are free, and so far the wind is in

[6] Anne Applebaum, interview in *El Mundo*, March 8, 2025

his sails. It is the euphoria of the one who feels powerful, which typically leads to feeling above the rules and knowing he is called upon to realise big projects. Perhaps this is why he does not follow the advice of Ludwig Erhard, the German finance minister, who said that most effective economic measures are actually declarations. In any case, the start of his mandate may be very different from what comes after. The best Trumpologists know that they must be prepared for surprising plot twists and constant surprises.

The checks and balances of US democracy will eventually constrain Trump, from the Supreme Court to state governors, civil society and the media. The international arena is where Trump can wreak the most havoc in his second term, through strong emotions, retreat, deals and territorial expansionism (Canada, Panama, Greenland...), all wrapped up in his fascination with the strong leaders of the worst autocracies.

45% of Americans disapprove of their president's decisions in the first few months. A majority do not want trade wars with Canada, Mexico and Europe, nor do they want to empower Elon Musk, plagued by conflicts of interest and determined to block the executive, regulatory and revenue-raising capacity that allows a federal state to function.

2.2. A WEAKER AMERICA

A few months into Trump's second term, the US is a weaker superpower's weakness has grown. It has broken bridges with its allies, inflicted unnecessary damage on its economy, and pulverised its soft power - the admiration for US values, policies and culture - without which global hegemony is impossible.

On the contrary, the new Western barbarians, as a character in Henry James' novel "The Americans" (1877) called the inhabitants of the United States, are ready to weaken multilateral organisations, which have favoured their interests and projected Western values. And this gives way to a much worse world.

But President Trump's gestures, statements and policies are not only a disruption, but also a major distraction from fundamental challenges that must be addressed jointly by the world's major countries and multilateral organisations. The president has withdrawn his country from the global fight against climate emergency, extreme poverty and coordination of global health issues. He ignores the importance of setting clear standards in the development of Artificial Intelligence. It aspires to continue to maintain superpower hegemony without providing stability for the world. Trade and defence alliances are called into question and their fundamental premise, shared interests and values with allied countries, is denied.

Leslie Vinjamuri, director of the US programme at Chatham House, London, warns that while Trump's presidency raises the question again of his country's global engagement, this question has been looming in the shadows for decades under previous presidencies.[7]

[7] Leslie Vijanmuri, "The new Trump Administration could herald a remaking of the international order. How should the world respond?", Expert comment, January 15, 2025, Chatham House

This time, however, the Trumpist combination of isolationism and nineteenth-century imperialism makes international cooperation between countries or blocs to address common problems much more difficult. It is true that US soft power in the new MAGA version is appreciated in parts of the world ruled by dictators and apprentice strongmen. The European Council on Foreign Relations' study "Alone in a Trumpist World", conducted in January 2025, reveals some very relevant data:

> "The citizens most concerned about Trump's return are in the closest allied countries. Only 22% of continental Europeans, 15% of Britons and 11% of South Koreans think it is good for their nations. Meanwhile, 84% of Indians, 61% of Saudis, 49% of Russians and 46% of Chinese appreciate that it is positive for their countries".[8]

In the early stages of Trump's second term, it is much harder to be an ally than a rival of Washington. In the first term, Trump played good cop with autocracies and his collaborators played bad cop. With allies, Trump was the bad cop and his collaborators were good cops. Now, there are no adults in the room who can contradict him, correct his mistakes and moderate his worst instincts. In the president's mindset there are only zero-sum games: for the US to win there must always be a loser.

Trade policy has been an act of self-harm. We have witnessed the spectacle of the arbitrary imposition of astronomical tariffs on over a hundred countries and territories, some unpopulated, followed by the temporary suspension of the application of most of them, and the subsequent adoption of exceptions and exclusions thanks to the influence of certain lobbies. Trump claims to be negotiating 200 free trade agreements, but the most visible attempts to bridge the gap and ease trade tensions, such as with China, India and Japan, have so far yielded few results.

The dollar, the world's reserve currency, has suffered and the financing of US public debt has become more expensive, calling into question the exorbitant privilege, defined by Valery Giscard D'Estaing in 1965, i.e. the ability to acquire real goods by issuing debt, with limited effects on its balance of payments.[9] The president's attacks and pressure on Jerome Powell, who heads the Federal Reserve until May 2026, have made the country's economic situation even more unstable.

One of the paradoxes of our time is that the two great free-trading powerhouses, the United States and the United Kingdom, have chosen to retreat and cut off their own access to the markets in which they compete. Both London and, a lesser extent, Washington are beginning to realise that opting for less economic freedom is a self-injury that makes them less influential and prosperous.

In the case of the United States, the so-called "liberation day" marked its Brexit from the global market.[10] But it is possible that gradually the Trumpist fury may begin to sub-

[8] "Alone in a Trumpian Worlds", January 2025, ECFR, https://ecfr.eu/publication/alone-in-a-trumpian-world-the-eu-and-global-public-opinion-after-the-us-elections/

[9] Omar Rachedi, "Trump, el dólar y el privilegio exorbitante: ¿la hora del euro?", *Expansión*, 17 April, 2025.

[10] Simon Nixon, "How Liberation Day Will Be America's Brexit", 30 March 2025, nixons.substack.com

side. The irrational imposition of tariffs, especially on allied countries, clearly hurts the domestic economy, harms global prosperity and favours China's rise. Investors and businesses demand predictable environments. Fortunately, the markets have shown themselves capable of curbing the worst of Donald Trump's economically unfounded ideas and the courts are beginning to stop his expansion of executive power. In his first months in the White House, the president has lost popular support and credibility in spades. Congressional elections in two years' time, along with judges and markets (and perhaps high cholesterol) could stop to Trump's worst decisions and make him a lame duck. But Trumpism will exists after his demise, with the same economic ideas and a similar contempt for classic notions of liberal democracy and constitutional checks and balances.

2.3. DONALD TRUMP ON RUSSIA'S INVASION OF UKRAINE

Trump's most worrying international turn has been his approach to Russia's invasion of Ukraine. The president has become a mouthpiece for Kremlin propaganda: Ukraine is to blame for the Russian invasion and the dictator is Zelenski, not Putin. The Kyiv government must pay the US for its military and financial contribution and for the lost profits of its companies that have withdrawn from Russia over the years.

The decision to reward Vladimir Putin for invading Ukraine has blown apart the transatlantic relationship rebuilt by Joe Biden. Trump has bought all the Russian disinformation about the war, whether out of ignorance or simply for short-term economic advantage.

The signing of the 'Investment for Reconstruction' agreement between the US and Ukraine on 1 May 2025 aims to facilitate a ceasefire and put an end to Russia's invasion of the neighbouring country. On the one hand, Washington is extracting a price from the ally it has been helping with arms and funding for three years, and on the other, it is sending a message to Moscow that the future of the Ukrainian economy is in its interest as a major shareholder.

However, there are missing pieces to the puzzle. The president had repeatedly announced on the campaign trail that he would bring peace to Ukraine 'in twenty-four hours', but it is not easy. The biggest obstacle is not Vladimir Putin's stubbornness to win, but Trump's misguided negotiating strategy. The president does not have patience to broker a peace that is as just and permanent as it is possible. He is keen to do business with Russia, even though the two economies are not very complementary and compete on oil and gas exports, Russia's monoculture. He is probably grateful to Russian investors who have sometimes saved his companies from ruin. Sooner rather than later he will lift sanctions and try to restore Russia's place in international fora such as the G-7.

In short, the New York tycoon has mistreated Ukraine while giving very important trump cards to Moscow without asking for anything in return: Ukraine will not join NATO, the United States will recognise the annexation of Crimea in 2014 and, most worryingly for Europeans, Washington will not offer security guarantees to the Kyiv government after the country's partition.

For its part, Moscow may accept a deal that will leave Ukraine in a very weak position and seek full control in a few years. But it is also likely to take advantage of the good cards the US has dealt it and continue the military campaign, periodically making small negotiating gestures now that victory is closer.

The repercussions of this likely false end to the conflict go beyond the European continent, which will suffer an unstable Eastern border and will find it impossible to create a relation of peaceful coexistence and cooperation with Russia. This prospect confirms the paradox that the United States, the still hegemonic superpower, does not want to provide stability to the world and is inviting China to accelerate is regional and global proyection.

3. THE RISE OF CHINA

3.1. THE CHINESE SECURITY IMPERATIVE

China has undergone an accelerated transformation in the last half century. It has experienced the miracle of becoming in just a few years a power that has left poverty behind and fought for world hegemony with the United States, competing in economics, technology and defence. The architect of this transformation was Deng Xiaoping, a pragmatic leader who combined Leninism with capitalism for the first time and restored China to great power status.[11]

The contrast with Xi Xinping's mandate since 2012 is stark. The Chinese leader has focused above all on strengthening internal and external security to maintain his political system despite the development of capitalism in the country and has led his country into a difficult economic moment. The elimination of opponents, the fight against corruption, the repression of dissidents and minorities, censorship, especially in the digital sphere, state intervention in the economy, control of technology companies, ideological rearmament, are some of the elements that illustrate the current Chinese leader's shift. The instrument has been the Communist Party, with committees in all enterprises and ultimate decision-making power in economic decisions. "For China, economics is politics", says Ambassador Rafael Dezcallar in a very suggestive analysis of China's rise to superpower status.[12]

China's foreign relations have gone beyond the principle enunciated by Den Xiaoping: "hide your strength, bide your time". The Asian giant wants to take its rightful place in the world without much delay, in accordance with its economic weight and relying on its exponentially growing military capacity. The Belt and Road Initiative, the leadership of the BRICS and being the main trading partner of 120 countries are no longer enough. The next step would be to change the international order according to a new balance of power, based on state sovereignty and not on the Western idea of universal

[11] Cfr. Rafael Dezcallar, *El ascenso de China*, Ediciones Deusto, 2025.

[12] Cf. Rafael Dezcallar, op.cit.

values as the foundation of human rights. Rivalry with the United States, a real technological and ideological confrontation, thus became the focus of its international policy. Thanks to the perceived decline of Western countries and their divisions, it competes with an advantage in the so-called global South and accelerates its regional projection. As Eva Borreguero explains:

> "In recent years, a dynamic cycle of mutually reinforcing correlation of forces has developed: on the one hand, Washington has strengthened its alliances with its Asian partners, and, on the other hand, Beijing has flexed its muscles and sought to strengthen its alliances with its Asian partners. This has led affected countries such as India, Australia, Japan, the Philippines and South Korea (including Taiwan) to increase their defence budgets, forge new coalitions and forge closer relations with the US. This dynamic will continue through 2025".[13]

3.2. THE RIVALRY BETWEEN CHINA AND THE UNITED STATES

The remainder of the 21st century will be dominated by an increasingly fierce rivalry between China, the power that aspires to global hegemony, and the United States, which wants to maintain that pre-eminence as much as possible.

Trump's most important foreign policy decision is still pending: to confront China or to retreat and allow the Asian giant to gain greater global weight. Elbridge Colby, a close adviser to the president and a senior official at the Department of Defence, has already said that Taiwan is not an existential US interest. But Republican "prioritisers" or hawks, such as Marco Rubio, want to put the brakes on China. Against them they have J.D. Vance, spokesman for the MAGA movement and in favour of isolationism, justified by the population's weariness after several unpopular and costly wars and the need to focus on domestic issues.

The United States' international priority over the past decade has been to contain China, the rising superpower rival. The next few years will be decisive in determining which of the two superpowers wins the race for technological supremacy. Dario Gil, the Trump administration's new Under Secretary of Energy for Science, has underscored this urgency:

> "Now is the time to elevate AI's ability to advance scientific discovery and solve problems in ways that were previously unattainable (...) If we don't succeed in this, rival nations like China will overtake us and the consequences will be dire. In the next four or five years, the world is going to witness the most important advances in technology, not just in the last hundred years, but those that have never been achieved before.[14]

[13] Eva Borreguero, "Indo-Pacific 2025: strategies, cooperation and competition", Panorama Estratégico 2025, Spanish Institute for Strategic Studies, Ministry of Defence, April 2025, p. 148.

[14] Lindsay McKenzie, FYI: Science Policy News, 16 April, 2025.

In this context of intense technological rivalry between the superpowers, Xi Jinping wants to go down in history as a great leader and measure himself against the likes of Mao or Den Tsiaoping. The way to do this is to take over Taiwan, a very uncomfortable Chinese democracy and the leading manufacturer of semi-conductors for the global market. But his goal is to do it without a war, even if the most likely lesson of the war in Ukraine is that the US is not ready to support its allies. Moreover, the current communist leader's domestic problems are piling up, which could lead him to accelerate his plans to end democracy in Taipei: collapse of the real estate sector, ineffective state interventionism, government inability to stimulate consumption, minority and youth protests, corruption and the failure of the covid zero policy.

China projects its internal security needs to the world through a long-term strategy in search of global influence, energy sources and raw materials. At the same time, it continues to have the mentality of being the central empire and views other countries as tributaries rather than equals, a mentality that has so far modulated the growing export of its political and economic model.

The Asian superpower is responding at its own pace to the climate emergency along with nuclear proliferation. In the current situation of a weakening transatlantic relationship and the US relinquishing its role as the provider of global stability, some Europeans may think that they will find a better ally in Beijing. But the truth is that democratic countries will have to defend themselves against China on many occasions and will find it possible to cooperate on others.

It should be remembered that China's leader, Xi Xinping, despises the Western model of liberal democracy and open economy as less effective than his combination of iron Leninism and unbridled capitalism. Externally, he has never fully respected international trade rules, from export subsidies to IP norms. It defends Russia's imperialist theses in Ukraine, having signed an "alliance without limits" before the invasion. Without this support, Moscow would not have the possibility today of choosing victory over negotiation with Kyiv. It projects China's enormous military power on the island of Taiwan and expands territorially in the South China Sea, in clear defiance of international law. Xi Xinping offers the rest of the world a model of autocracy in which there are no universal values, human rights or rule of law. The individual is always subordinate to the collective and all other countries are tributaries of China, the empire at the centre. It is easy to conclude that, from a European perspective, the term dysfunctional superpower also applies to the Beijing regime.

4. EUROPEANS FACING A WORLD FOR WHICH THEY ARE UNPREPARED

4.1. FROM INTROSPECTION TO STRATEGY

The EU and its member states are not comfortable in a world where security is the dominant imperative for top US and Chinese policy makers and affects so many areas - defence, investment and trade, energy, technology, migration, health. The United

States, the Western superpower, is no longer the reliable provider of European security and global stability. This is why Brussels' excessive introspection in recent years, in which it has debated intensely and with a certain Byzantinism about the continent's strategic autonomy, open or not so open, needs to be left behind. The urgent question is: how can Europe contribute to solving global problems in a world where security has become the overriding interest?

It is undeniable that, in the face of Russia's invasion of Ukraine, the EU has acted swiftly and with unity, even if sanctions have not been very effective and military support has always been behind the curve (the late dispatch of long-range missiles, for example).

Indeed, the European Union has been facing a series of existential crises for seventeen years: the triple crisis of banking, debt and growth in 2008, which forced a redesign of the euro, the migratory avalanche of 2015, the rise of populist and anti-European nationalist movements , well exemplified by Brexit, the pandemic and its devastating consequences on health and the economy, and the Russian invasion of Ukraine.

In each of these five major crises, the EU learned valuable lessons and adopted reforms guided by the objective of deepening integration. The most successful case of understanding crises as opportunities, in the best European tradition, was the creation of the so-called Next Generation Recovery Fund, a highly innovative federal economic-financial instrument.

The sixth crisis comes with the international disruption brought about by Donald Trump's second presidency. The problem is that a defensive attitude is no longer enough. Europeans must formulate a strategy that allows them to learn the language of power, as Josep Borrell warned at the beginning of his term as High-Representative and become an actor with a seat at the table in the new geopolitical era, if they do not want to fall into irrelevance.

The coincidence between the transgressive current of US policy and the subversive activity of Russia's neighbour puts Europeans in a very difficult situation. From Washington, the president praises anti-European parties. Elon Musk has also shown his closeness to the British far right and seems willing to finance the German neo-Nazi party, the AfD, second after the elections in February 2025. For Musk, AfD and Giorgia Meloni's formation in Italy are interchangeable parties because of their rejection of immigration, regardless of the clear differences between the two discourses.

Europe has lived seven decades of peace under the military umbrella of the United States, while developing the best social state in history and developing its political and economic integration. But it has not put enough effort into security and defence, still largely a national competence today. As with a long list of economic and social policies already Europeanised, defence needs to be the next chapter of integration while at the same time repairing the economic engine: completing Economic and Monetary Union, launching a Capital Markets Union, increasing the budget, designing an EU industrial policy. All this despite high levels of debt, low growth and Europe's status of "digital slave" of the United States. The Union is over-diagnosed (Draghi and Letta reports, among others): the challenge is for institutions and governments to execute the strategy and, as Jean-Claude Juncker said during the single currency crisis, still be able to win national elections.

It is true that the countries of the continent are investing more and more in defence (a total of around 40% of the US budget), but this is done based on national logics, with fragmentation and lack of coordination, and without a sufficient industrial base. These limitations have been known for years, and little has been done to remedy them. There is a widespread pacifist mentality among voters, so the problem is not only one of institutions, capabilities and means.

Thus, much of Europeans' global security and defence work in the future must continue to be as allies of the United States, the Western superpower with which there are differences that will be resolved over time. Europeans must buy time, act like "latent Atlanticists", seek accommodations, negotiate as much as possible with Washington, and in the meantime develop security and defence capabilities and strengthen their economy.

The option of a rapprochement with China clashes with European values and interests in the medium term, no matter how much this rhetorical possibility may be wielded from Brussels, Paris or Madrid. The EU has already changed its perception of China - it sees it as a 'systemic rival' - and step by step is moving closer to the traditional US view of containment of the Asian giant. It does not consider it an enemy, however, as is increasingly the case in Washington, and prefers to de-risk than decouple its economy and stop investing and trading.

Despite the rise of nationalism and populism, the two sides of the Atlantic share a common history and political and moral foundations in a world where the West is increasingly ceding power to other emerging actors. The European temptation may be to project a continental nationalism spurred by anti-Americanism. But this would be a mistake: the integration project is only valuable if it retains its cosmopolitan aspiration, which sets limits to the rise of all strong collective identities. The task of the Union and its states in the coming years is to defend Western values, which they share with millions of citizens of other countries, starting with half of the United States, many Latin American countries and Asian allies.

In other words, Europeans need the US as their main security and defence ally, while developing their own capabilities. In North Africa and the Sahel, for example, Europe will increasingly have to act without the US. At the same time, the US no longer has the capacity to contain China without working in coalition with its allies.

4.2. TOWARDS A DEFENCE UNION

The big question today is whether the EU can evolve and equip itself in time with the necessary security and defence capabilities to manage major geopolitical issues and become a leader of the free world. It is an existential question, forcing a revision of a well-established belief, contested among others by Joseph Weiler:

> "It is obvious that no European country can defend itself alone. And that being so, it is ridiculous to consider that defence should not be pooled ... European states have neglected their defence, thinking – based on the memory of the 20th century – that the US will always come to the rescue in case of need".[15]

The goal of boosting European defence requires answering three questions: how to maintain the transatlantic link when the US shifts priorities, reverts to isolationism and favours rivals over allies; how much centralisation of powers around the EU in defence matters is needed; and how fast is it necessary and possible to move forward in either case.

Just as the debates around Economic and Monetary Union included the idea of a Political Union, now the centralisation of security and defence policy in Brussels requires the strengthening of democracy and the legitimacy of the Union.[16] It will not be easy, due to the fact that anti-European populist parties, fuelled by anti-migration messages, continue to grow in support and already govern in countries such as Hungary and Slovakia. France's presidential elections in 2027 will be crucial in this regard.

In return, polls indicate that citizens trust EU institutions more than national ones. Seventy-seven per cent call for a continent-wide security and defence policy, although it is not clear that they are willing to pay the price in taxes or accept the trade-off in public investment in social policies.

The EU's institutional structure also introduces an additional complexity to react quickly, due to the lack of a real executive power in Brussels and the division of legislative power between three institutions with shifting agendas, the Commission, the Council and the Parliament. It takes on average four years from the time a directive is proposed until it is implemented through national law.

The Union, as has already been noted, does not have full competences in foreign, security and defence policy, and when it tries to exercise them, it is slowed down or blocked by the requirement for unanimity among 27 member states. Valuable steps have been taken, such as the appointment of a new member of the Commission in charge of defence industry, the increase in funding for military spending, the proposal for a common defence market and the REARM Europe initiative. But the short-term solution lies in ad hoc coalitions of member states that are able and willing to make progress in these areas. The medium-term challenge is to do so within a model of Community integration that is flexible, renewed and strengthened in its capabilities. It is a question of being able to take decisions effectively, with a much-strengthened common budget and with institutions subject to the rule of law and more capable of being accountable to the citizens. In the realm of defence, Brussels will demand duties from them – to protect Europe – and not just grant them rights.

It should be noted that the easy solution of appealing to strong leaderships would

[15] Cf. interview with Joseph Weiler, *The Objective*, December 10, 2022.

[16] Cfr. José M. de Areilza, "Unión Política" y gobierno económico del euro", Anuario del Euro 2014, Fundación de Estudios Financieros and Fundación ICO.

not work in the very complex and fragmented European context, where there is no alternative to the hard work of negotiating and seeking agreements between different actors. When institutions are weakened, as they are in our time at national and international level, the call for personal leadership becomes more present. But adult politics must reject the childish idea that a saviour leader will appear and by his or her mere presence resolve issues of enormous complexity. As we see with the proliferation of 'strong men' in governments halfway around the world, they end up looking for internal and external enemies to blame them for the fact that their policies do not work.

Within the Union, however, reforms in Germany during the new legislature will prove decisive for Europe as a whole. The new chancellor, Friedrich Merz, looks set to exercise dual domestic and European leadership. Europe's hegemonic power and the Union's main exporting country needs to replace at least three dependencies that prevent it from prospering, competing and defending itself in the new era we have entered, but it will not be easy. These are addiction to Russian gas, a sharply reduced supply during the war in Ukraine with high costs for its industry, the dependence of its industry on the Chinese market, especially the automobile market, and the lack of investment to compete in the new industrial revolution without conforming to the disruptive technologies coming from the United States.

Pending enlargements of the European Union, to the Western Balkans and to Ukraine and Moldova, once again pose the dilemma of the 1990s, enlargement versus deepening. This time the answer should be clear, deepening comes first, to address the lack of European security and defence capabilities as soon as possible.

4.3. TECHNOLOGICAL DEPENDENCE AND EUROPEAN DEMOCRACY

The most difficult chapter in the relationship between Europeans and the United States is in the field of digital technology, an ongoing revolution in which the old continent is highly dependent on American scientific advances and American companies. The problem is compounded by the influence of the techno-optimism movement in the White House, which rejects regulation and taxation as instruments to create rules of the game in the digital sphere and Artificial Intelligence. Its anarcho-libertarian vision also affects the blocs or third countries with which the US engages, which it does not recognise as having the right to apply their own rules in this field.

José Ignacio Torreblanca recalls that:

> "During the US election campaign, J.D. Vance warned the EU that regulating X would be seen as an attack on free speech incompatible with the democratic values of the Atlantic alliance. He added that such actions would lead the US to withdraw its support for NATO. This is tantamount to blackmail. The choice for the EU is stark: ignore digital services laws, giving free rein to Musk and Zuckerberg's platforms to spread disinformation, hate speech

> and political interference; or suffer significant economic repercussions and security risks".

In the words of this technology and policy expert:

> "Europe must make it clear that this is not a confrontation between the United States and Europe, but a dispute between certain technology oligarchs and democratic governance. The focus must remain on enforcement against those who exploit their market dominance for economic gain and accumulate political influence to preserve those gains".[17]

The alternative of turning to China to boost the development of digital technology and AI in Europe does not hold up, given the Beijing government's political approach to this strategic sector. The communist regime is not only seeking to win the race for primacy over Washington but is already using the digital ecosystem for international espionage, control of citizens' activities, censorship, repression and the assertion of its authoritarian system.

4.4. THE NEW PARTNERSHIP WITH THE UNITED KINGDOM

One piece of good news for continental Europeans is that more and more British citizens think that a closer relationship between the UK and the EU is necessary, including 26% of those who voted for Brexit.

There are several reasons for this new state of opinion. The threats to common security posed by the war in Ukraine make good the saying that all European countries are small; some just don't know it yet. The return to the White House of Donald Trump, a president highly sceptical about the importance of the transatlantic link and willing to engage in trade wars with his allies, also boosts cooperation between the two sides of the channel.

This is not to say that the British will rejoin the EU any time soon. The trauma of Brexit is still present, and it will take at least the arrival to power of a new generation before membership can be reconsidered. Political crises in France and Germany and divergences between the two integration drivers also make it difficult for the EU to react quickly to threats to its security and to consider a partnership with its former member state. There are, however, many concrete initiatives on which to work together. The list of pending issues is endless: defence, the economy, education, research, technological development, the fight against climate emergencies...

The UK remains the continent's leading military power and second largest economy, although the state of its public finances hampers the updating of its global capabilities. Keir Starmer's Labour government sees its reform project as one of deepening relations

[17] José Ignacio Torreblanca, "Big tech, Donald Trump and "techno-imperialism": how to prevent Europe from becoming a digital colony", Commentary, ECFR.eu, 21 January 2025

with the EU's internal market and improving access to it. It is true that the Conservatives have been radicalised after their electoral defeat, but a third of their voters want better cooperation with the EU. Pragmatism is beginning to replace an arrogance that in 2016 masqueraded as patriotism. On the continent, the UK is increasingly perceived as part of the solution.

Britain's shift towards a reunion with the European Union is underway. Starmer is pushing for negotiations with Brussels and member states on many fronts, from defence to immigration, with the most prominent being the attempt to re-enter the internal market. So far, the approach of mutual recognition of rules on goods has not been well received on the continent but reveals a clear desire to return home. In a Europe where security has become the dominant imperative, the UK has much to say and contribute.

On trade with the US, the UK has shown the rest of Europe the way: negotiate relentlessly, seek accommodation and display strategic patience. Its negotiators have argued that the trade deficit with Washington is very small and becomes a surplus if services are included in this calculation. They have also made much of King Charles III's invitation to Trump to enjoy another state visit. London has the best diplomacy in the world, operative again once Prime Minister Starmer lets it work, in contrast to the past distrust of gleeful Brexit supporters.

Five weeks after Donald Trump proclaimed the day of liberation and flooded the world with tariffs, the UK has been able to negotiate an agreement in principle against the protectionist tsunami. The so-called "US-UK Economic Prosperity Pact" is a starting point for selectively reopening the US market, as long as ownership of companies based in the UK is in no way connected with China. It proposes negotiating exemptions from tariffs on steel and aluminium, later pharmaceuticals, and creating a broad quota for car exports to the US of 10 per cent instead of the current 25 per cent. In return, meat imports would be facilitated and a pact on digital services and artificial intelligence would be negotiated. This is an area that the US wants to deregulate as much as possible, including outside its borders, in the name of a maximalist vision of freedom of expression, starting with the elimination of taxes on its technology companies.

Trump has heralded the start of negotiations between the two Anglo-Saxon countries as a great victory and added a confusing explanation: "we don't sign agreements; they sign agreements with us".

5. SOME CONCLUSIONS

It is essential that the EU's reaction to Donald Trump's attempt to blow up world trade responds to a strategic vision and is not just defensive, driven by the urgency to stop the blow. It is of little use to toughen the language and use from Brussels expressions copied from the MAGA world. Nor is there much point in competing in an escalation of tariff barriers, in the hope that Trump will at some point stop playing poker and be willing to engage in serious bilateral negotiation. Likewise, there would be little point in increasing trade with China, a short-term solution that clashes with the need to minimise risks in the relationship with the Asian superpower.

Economic globalisation driven by the Anglo-Saxon world has had enormous positive consequences all over the world. The challenge to the expansion of capitalism by the countries that did most for it (the US and the UK) is a gigantic self-injury. In contrast, there is an urgent need to negotiate pragmatic reforms that renew the advantages of economic freedom, multilateralism and international rules.

European security will be dependent on cooperation by the US for many years, even if the EU and its Member States get their act together, agree on a clear plan of European defence and execute it. We share with the US interests and values, despite the weakening of America's democracy in the last months. We also must face together as allies the threat of Chinese global hegemony. It would be a mistake to throw away more than a century of Atlantic pacts (since World War I). Differences with Washington can be worked out with infinite patience and endless negotiations on the part of Europeans, who should think of themselves as "latent Atlanticist". The economic and financial engine of the EU needs to be fixed urgently and the challenge of migration tackled with better ideas and means than the slogans used by extremist parties.

Finally, in the new geopolitical era, it is necessary to avoid the trap of realism. This increasingly widespread view should only serve to analyse international relations as they are, but not as they should be. The use of force cannot become the first principle of international relations. Realism is useful for understanding how the distribution of global power is changing, but very harmful if it serves to dismiss any normative vision that advocates diplomacy, negotiation, a world order based on rules and the work of international organisations. This vision is profoundly mistaken: it denies that moral progress exists and leads to paralysis and resignation. Above all, it could not be more alien to the meaning of the word Europe, the name of our civilisation.

A few months ago, Michael Ignatieff, the Russian-born Canadian intellectual and politician, participated in a debate about his latest book, "On Consolation", in Madrid. At the colloquium, a young woman argued that she did not want to have children because the future was deeply hopeless, due to the accumulation of threats that weigh on our societies. Professor Ignatieff responded: "We have to look for hope in the past. Our great-grandparents, grandparents and parents lived through even more difficult times, they decided to fight and move on". Thanks to them, we Europeans know what we must do now.

2. LAGGING BEHIND: PRODUCTIVITY GROWTH IN THE EUROZONE AND THE USA

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ABSTRACT

Productivity slowed down both in the Eurozone and the USA. Although there seems to be common trends, the gap in productivity levels between both areas is widening, with Europe lagging behind. This paper documents the recent productivity performance of the USA and the EU, focusing, first, on the differences in the contributions of productivity to GDP growth, and, secondly, on the sectoral composition of GDP and investment. It also discusses the main drivers of productivity -such as technological adoption and innovations in automation, artificial intelligence, and digital infrastructure, investment in physical, human, and intangible capital, market flexibility and the regulatory environment-, and how technological and demographic trends may condition productivity growth in the next decades.

1. INTRODUCTION

Productivity growth is the only feasible source of sustained economic growth and social welfare over the long run, as increases in income and consumption per capita, leisure time, and resources for public policies can only arise from higher productivity.

Concerns about the widening productivity gap between Europe and USA came to take predominance on the policy agenda of EU countries a decade ago. For instance, in September 2016 the Council of the EU recognized that "raising productivity is a multi-faceted challenge which requires a set of well-balanced policies aimed, in particular, at supporting innovation, increasing skills, reducing rigidities in the labor and product markets, as well as allowing a better allocation of resources", and recommended to Member States the establishments of National Productivity Boards (NPB) with the goals of "track developments and inform the national debate(s) in the field of productivity and competitiveness…(so that they) contribute to the enhancement of ownership of the necessary policies and reforms at national level and to improving the knowledge basis for Union economic policy coordination".[1]

Nowadays, nine years later, concerns about the lack of productivity growth in Europe are even more acute. Nineteen EU countries have established National Productivity Boards to improve diagnostics and recommend productivity-enhancing policies.[2] And, as forcefully expressed in the reports by Mario Draghi and Enrico Letta, the only way to maintain Europe's fundamental values, such as prosperity, equity, freedom, peace, and democracy in a sustainable environment, is to grow by increasing productivity.[3] To a large extent as a response to the Draghi and Letta reports, in January 2025, the Commission presented the so-called *Competitiveness Compass,* a new roadmap to restore Europe's dynamism and boost economic growth.[4]

Beyond the crucial role of productivity to sustain economic growth, there are two other reasons for concern. One is that the economic recovery after the Covid-19 crisis has shown more dynamism in USA than in Europe, so that the gap in income per capita has widened. Another is that in a context of demographic decline and ageing of the labor force, productivity growth is even more crucial, as an increase of the weight of older population in total population implies, ceteris paribus, a decline in income per capita.

Productivity slowdown is also a phenomenon observed in the USA, so that there seems to be common trends in both areas. However, the more dismal European performance in this respect calls for a rigorous comparison to identify the main drivers of productivity that are behind the productivity slowdown, and to suggest policy recommendations to impulse productivity growth. This chapter addresses this comparison. After a brief description of historical backgrounds, we present recent data on productivity growth in Europe and in USA. As explanations of the widening gap between both areas, potential culprits are differences in the main drivers of productivity such as technological adoption and innovations in automation, artificial intelligence, and digital infrastructure, investment in physical, human, and intangible capital, market flexibility and the regulatory environment, and demographic factors.

[1] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016H0924%2801%29

[2] https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/eu-assessment-and-monitoring-national-economic-policies/evolution-eu-economic-governance/national-productivity-boards_en

[3] Draghi, M. (2024), The future of European competitiveness. Letta, E. (2024), Much more than a market.

[4] https://ec.europa.eu/commission/presscorner/detail/en/ip_25_339

2. PRODUCTIVITY GROWTH IN EUROPE AND US: HISTORICAL CONTEXT

Figure 1 reports on the long-run trends in GDP per capita, labor productivity, TFP and hours worked per employee in the Euro-zone and USA during the period 1890-2022.[5] In both areas, GDP per capita grew at an average annual rate of 2,1%. In broad terms, there were two subperiods when GDP grew above trend: 1890-1914 and the last third of the XX Century. However, during the last decade, GDP per capita growth was below trend both in Europe and in USA.

As for GDP per hour worked, average annual growth rates were 2,3 in USA and 2,6 in the Euro-zone, while for TFP the corresponding figure is 1,8% in both areas. The two measures of productivity show convergence of the Euro-zone to USA levels by the end of the XX Century. From then on, productivity in Europe started to lag, even though during over the same period in the USA labor productivity and TFP growth were below trends.

Finally, hours worked per employee declined at an average annual rate of 0,42% in USA and 0,54% in the Euro-zone, so that, by 2022 Europeans worked about 13% less hours. Sources of this difference in labor supply are higher taxes in Europe, most importantly to the effect of the marginal tax rate on labor income (Prescott, 2010), and differences in weeks worked, in the educational composition, lower weekly hours worked in Scandinavia and Western Europe, and lower employment rates in Eastern and Southern Europe (Bick et al. 2019).

These long-run trends are relevant for three reasons. One is that they “show” instead of “showed” the long-run implications of sustained productivity growth. Minor changes in growth rates sustained over longer periods result in large increases of productivity levels. Another is that they highlight periods of growth below trend, and, hence, they provide hints for identifying the main drivers of productivity growth. Finally, they show how the widening gaps in productivity and hours worked per employee between Europe and USA translate into (about one third) lower GDP per capita.

3. PRODUCTIVITY AND GDP GROWTH IN EUROPE AND USA

There are three main facts about the different productivity performance of Europe versus the USA in the XXI Century. One is that productivity growth has been higher and contributed more to GDP growth in USA than in Europe. Another is that the better productivity performance in USA is mostly to be found in service sectors, particularly those with a higher technological content. Finally, since the COVID-19 crisis the productivity gap between USA and Europe is widening. We now document these three main facts.

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[5] Data are from Bergeaud, Cette, and Lecat (2016). A more detailed account of productivity growth in Europe since 1890 can be found in Bergeaud (2024).

3.1. SOURCES OF GDP GROWTH IN EUROPE AND IN THE USA

There are only three ways to increase production of goods and services: i) to employ more and/or better labor, ii) to use more and/or better capital, and iii) to increase Total Factor Productivity, TFP, (i.e., the results from the complementarity between capital and labor).[6] Hence, the productivity advantage of USA with respect to Europe can only stem from three sources: i) More human capital (higher levels of education and skill development), ii) higher investment and/or a better composition of capital (use of more advanced technologies, more intangible capital, better financial conditions to provide those investments,..) and iii) better regulatory environments, labor market dynamics, and more investment in R&D, which are the main factors driving TFP.[7]

Under these premises, growth accounting (breakdown of GDP growth in the three factors above) provides the most intuitive and transparent way to document all these factors driving the differences between productivity growth between Europe and USA.

Data from EUKLEMS-INTANProd, the most comprehensive cross-country data set with information on all sources of economic growth, allow to compute the contributions of the number of hours worked and changes in the composition of employment (as a proxy of changes in labor efficiency), of investments in three types of capital: intangible, tangible ICT (Information and Communication Technologies) and tangible non-ICT, and, finally, TFP.[8]

Table 1 summarizes the main results during the period 1996-2021 in US, and four major Eurozone economies (Germany, France, Italy, and Spain).[9] First, the GDP average growth rate of the US economy is almost twice the growth rates of Germany, France, Italy, and Spain.[10] Secondly, despite the growth slowdown since 2007 in both areas, the gap between US and the four major Eurozone countries widens even more. Thirdly, the contribution of TFP has declined over time. Fourthly, the main factors that explain higher growth in the US are higher TFP growth (which has been even negative in Italy and Spain), and higher investment in all types of capital, especially in tangible ICT and intangible capital. The contribution of labor quality has also been lower in the European countries than in the US.

Summing up, among all the factors that contribute to higher GDP growth, the major four eurozone countries lagged in all of them. Hence, as previously found by Bart van Ark, O'Mahony, and Timmer (2008), the gap in productivity between US and Eurozone

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[6] In the words of Jovanovic (2000), economic growth arises from the growth of knowledge and good economic incentives.

[7] For instance, by 2022, the USA was spending 5% of its GDP on tech investment, while the eurozone was spending only 2.8%. Similarly, the USA spent 3.5% of its GDP on R&D compared to the eurozone's 2.3%.

[8] See Bontadini et al. (2023).

[9] Data are available at https://euklems-intanprod-llee.luiss.it/. The latest year available, with full information, is 2021. Germany, France, Italy, and Spain are aggregated into Eurozone-4 with weights 0.4, 0.26, 0.19, and 0.14, respectively.

[10] Only Spain was close to register similar growth rates as the USA during the first half of the period (1996-2007), the years of the housing bubble.

countries continues to arise from slower adoption of the knowledge economy, lower investment in information and communication technology (ICT), and slower multi-factor productivity growth in Europe. Overall, the slower emergence of the knowledge economy combined with worse firm dynamics (survival of unproductive "zombie firms" that continue to operate and lower entry of new, dynamic firms) and slower technology diffusion are the main roots of the productivity gap between Europe and the USA.

3.2. SECTORIAL DIFFERENCES IN PRODUCTIVITY GROWTH BETWEEN EUROPE AND USA

Productivity may increase by either higher efficiency of production factors and higher TFP in each sector of the economy or by reallocation of resources from less productive to more productive sectors of activity. Similarly, cross-country differences in productivity may be due to differences in productivity within sectors or by differences of the relative importance of more productive sectors. In the shorter-term, intra-sector productivity growth dominates, while in the longer-term reallocation of resources towards more productive sectors (i.e., structural change) is a powerful source of growth.

As for changes across time, standard shift-share analysis concludes that intra-sectors changes in productivity are the main drivers of productivity growth in USA and the Eurozone.[11] For instance, the manufacturing sector in the USA has seen moderate productivity growth, but still higher than in the euro area, where productivity growth was slower, with some countries even facing stagnation. In the retail sector, the USA shows a better performance in e-commerce and efficient supply chain management, in contrast with Europe, where differences in market structure and more conservative consumer behavior slowed down productivity growth in these sectors. In any case, it is the IT sector the main powerhouse of productivity growth in USA, favored by significant investments in R&D, venture capital investments, and a strong innovation ecosystem, while in Europe lower investments, less appetite for risky investments, and excessive regulation retarded productivity growth, especially in more technologically oriented sectors.

As simple illustrations of the sectoral differences in growth between the USA and the four major Eurozone countries, Figures 2 and 3 show that the main differences in the contributions of TFP and intangible capital to growth by sectors between the USA and the four major economies of the eurozone are concentrated in a few sectors close to Information, Communication Technologies, such as Fabrication of Computer, Electronic, and Optical Products and Electrical Equipment and Computer programming, Consultancy, and Information Services (see Appendix for the lists of sectors in the Figures). This sectoral composition of GDP and investment gives the USA leads in Digitally Enabled Services (cloud computing and data storage, Software licensing and SaaS platforms, Digital content distribution, e.g., streaming services, Telecommunication and cybersecurity services, Remote diagnostics and telehealth platforms) ICT-Producing In-

[11] See López and Szörfi (2021) and Dias da Silva et al. (2024).

dustries (semiconductors and microprocessors, enterprise software, operating systems and platforms, and AI and machine learning platforms), ICT-Use-Intensive Industries (finance and insurance, e.g., fintech platforms, algorithmic trading, E-commerce and logistics, healthcare IT, and advanced manufacturing), and Intellectual Property and R&D Services (licenses for software and industrial designs, R&D services tied to ICT and high-tech manufacturing, and patents and trademarks related to digital technologies). Among all of these, the ICT-intensive sectors that the Draghi's report (2024) highlights as strategic for the future of Europe competitiveness are, together with energy, critical raw materials, defense, and transport, Digitalization and Advanced technologies, High speed/capacity broadband networks, Computing and AI, Semiconductors, Space, and Pharma.

3.3. PRODUCTIVITY GROWTH IN EUROPE AND USA DURING 2021-2024

The post-pandemic period has also witnessed a widening of the gaps, both in GDP and productivity growth, between USA and the eurozone, as can be seen in Figure 4 that provides the decomposition of GDP growth in the contributions of labor (working hours and improvements in labor quality), capital (aggregate and utilization rate), and Total Factor Productivity. Over this period the average annual growth rate of TFP has been 0,43% in USA (similar to the one registered during 2008-2019), and 0,11% in the Eurozone four major economies (significantly lower than the one registered for the 2008-2021, that is 0,7%).

Over short periods of time, both structural and cyclical factors drive productivity growth. Hence, assessment of the productivity performance during the recent period of economic recovery (2021-2024) should take into account the relevant economic shocks during the pandemics and afterwards (disruption of global supply chains, Ukraine war, increasing energy prices, surge in inflation).

Moreover, labor hoarding during the pandemics, and labor reallocation afterwards, ought to have generated higher volatility in labor and TFP productivity. Labor hoarding makes labor productivity pro-cyclical, that is, higher when demand is higher. Labor reallocation also impulses productivity, as labor flows from low to higher productivity jobs. Hence, after the pandemics, labor hoarding and reallocation conceivably stimulated productivity growth. However, as seen in Figure 4, whereas 2021 and 2023 were years of positive TFP growth in the USA, in the major four European countries, it is only in 2023 and 2024 when TFP growth registered positive figures. Thus, the USA has been more effective in adapting to new economic conditions post-pandemic, while Europe has struggled with slower recovery and adaptation to the changes in the economic scenario.

4. LOOKING AHEAD: MAIN CHALLENGES TO SUSTAINED GROWTH

The drivers of productivity growth could be classified into three categories: i) factors that increase the efficiency of labor, ii) factors enhancing the efficiency of capital, and) drivers of TFP. Investments in human capital that increase labor quality, and investment in technology and intangibles that increase the efficiency of capital are the main productivity drivers in the first two categories. Regulation and social capital (i.e., a broad concept related to institutional quality) that affect to the allocation of resources and to the complementarities between capital and labor are in the third category. The latter is especially relevant for the sectoral composition of production. For instance, the degree of market competition, barriers to entry and to firm growth, liquidation of less productive firms, and quality of labor relations determine firm dynamics (which firms are created, destroyed and which ones grow) and, hence, productivity growth by allocation of production factors to more efficient firms. Finally, from a firm perspective, technology, innovation, specific labor skills, quality of management, and supply chains are the main dimensions on which to assess productivity growth.

Conventional wisdom is that the main reasons of Europe lagging behind the USA in productivity growth are to be found in lower investments in technological, R&D, and intangible capital, less innovation and diffusion of new technologies, regulation that restrict competition and opportunities for creation and growth of productive firms, mainly by maintaining a segmented market, and less availability of funding (mainly, risk capital) for the creation and scale-up of new ideas, joint-ventures and new technological firms (Letta, 2024, and Draghi, 2024). Thus, structural reforms to boost innovation and investment are the main levers to close the productivity gap between the USA and the EU. They should be targeted towards reducing market fragmentation, enhancing human capital, improving infrastructure, increasing the quality of regulation both in the labor and in the product and services markets, and eliminating fiscal distortions to encourage investment and entrepreneurship. In all these dimensions there is substantial heterogeneity across EU countries, so that co-ordination among them is also crucial for the correct design and implementation of structural reforms.

Looking ahead, two structural trends will condition economic growth in the near decades. One has to do with the developments and adoption of technologies associated with robotics and artificial intelligence. Another is a radically changing demographic scenario, with declining and ageing labor forces.

On the impact of AI and robotics on productivity, there is wide uncertainty. Estimates range from an annual increase of 0,07 pp (Acemoglu, 2025) to 1,3 pp (Aghion and Bunel, 2024). The uncertainty comes from different assessments of the productive tasks that could be conducted by AI, in how many of those tasks it could be profitable to replace human labor by AI, and how much productivity will increase as a results of AI implementation. What is being observed so far is that, first, AI technologies are not so much substituting human labor as they are complementing skilled workers, so that productivity effects would not be much different as those derived from digitalization and adoption of ICT (Albanesi et al., 2025), and, secondly, that Europe has lost the race in the development of Large Language Models - that are the foundations of Generative AI- to USA and China, and European firms are slower in the adoption of AI (Hazan et al., 2024).

As for demographics, prospects are that, at least during the remaining first half of this Century, population ageing will accelerate, with profound consequences in the age structure of the working population. As seen in Figure 5, the average ages of the working-age population (20-69), that is nowadays almost 2 years higher in the Eurozone than in the USA, will increase by about 1 year and 1,5 years, respectively up to the mid-Century. These increases do not provide a full picture of the drastic change in the age structure of the working-age population. For instance, the ratio of young workers (20-39) to older workers (40-69), which is significantly higher in the USA than in the Eurozone, will decrease by 13 pp and 5 pp, respectively, up to 2060.

In a demographic scenario under which working-age populations are going to decline significantly over the next decades, productivity growth becomes even more important to sustain levels of GDP per capita and to continue reducing working hours per employee. Additionally, ageing of the working-age population slow down productivity growth by three channels. One is the result of the age composition effect when productivity growth is lower at the later years of the working life. Another is that productivity growth is lower for all age-groups in countries where population is older. This effect arises through effects on innovation, entrepreneurship, and firm dynamics. For instance, Aksoy et al. (2019) using an endogenous growth model conclude that the current trends of population aging and low fertility are projected to reduce output growth, investment, and real interest rates across all OECD countries. Finally, productivity growth is mostly based on the complementarities among production factors, including the complementarity between young and older workers, which is likely to be diminished in a scenario with a less balanced age structure of the working-age population.

5. CONCLUDING REMARKS

Productivity growth is the only source of sustained increases in GDP per capita and leisure time, which are positively correlated with (almost) all indicators of social welfare that could be considered. The Eurozone registered poor productivity growth since the beginning of this Century, and, although productivity growth has slowed down in the USA, over the same period, the gap between the two zones has widened. In a context of technological change and population ageing, the issue of how to achieve higher productivity growth has become crucial to sustain social welfare in Europe.

Which products and services are produced and how they are produced are at the roots of aggregate productivity. Complementarities among production factors and economic regulations that provides the right incentives for investment and enhancing efficiency are also key for consolidating environment that favors productivity growth.

Good news is that productivity has arrived at the center of economic policy agenda. After being somehow disregarded in the debates about economic policies, in the last decade new institutions such as the National Productivity Boards, established in 19 EU countries after a recommendation of the EU Council, and recent keynote reports on productivity and competitiveness in the EU (Draghi, 2024, Letta, 2024) are contributing to improving the analysis of productivity in policy areas and to provide guidelines about how to impulse productivity growth in Europe.

Bad news are that Europe seems to be adapting to new technological changes at a lower speed than USA and China and that demographics prospects are not favorable to productivity growth. The adoption and implementation of AI technologies in the production of goods and services require the investments and efficient regulation of which Europe has been recently lacking. Population ageing is not going to be reverted and its negative impact on economic growth could be significant. These two conditions imply that the policy concerns to impulse productivity growth in Europe should be even more prevalent.

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APPENDIX.

List of sectors and codes in Figures 2 and 3.

Sector	Sector_code
Agriculture, Forestry, and Fishing	A
Mining and Quarrying	B
Manufacturing	C
Food, Beverages and Tobacco	C10-C12
Textiles	C13-C15
Woods and Printing	C16-C18
Coke and Refined Petroleum Products	C19
Basic Chemicals	C20
Basic Chemicals and Pharmaceutical Products	C20-C21
Pharmaceutical Products	C21
Rubber and Plastics	C22-C23
Basic Metals and Fabricated Metal Products	C24-C25
Computer, Electronic, and Optical Products	C26
Computer, Electronic, and Optical Products and Electrical Equipment	C26-C27
Electrical Equipment	C27
Machinery and Equipment	C28
Motor Vehicles and Transport Equipment	C29-C30
Furniture, Repair and Other Manufacturing	C31-C33
Electricity, Gas, Steam, and Air Conditioning Supply	D
Electricity, Gas, Steam, Air Conditioning and Water Supply	D-E
Water supply	E
Construction	F
Trade	G
Sale of Motor Vehicles	G45
Wholesale, except Motor Vehicles	G46
Retail trade	G47
Transportation and Storage	H

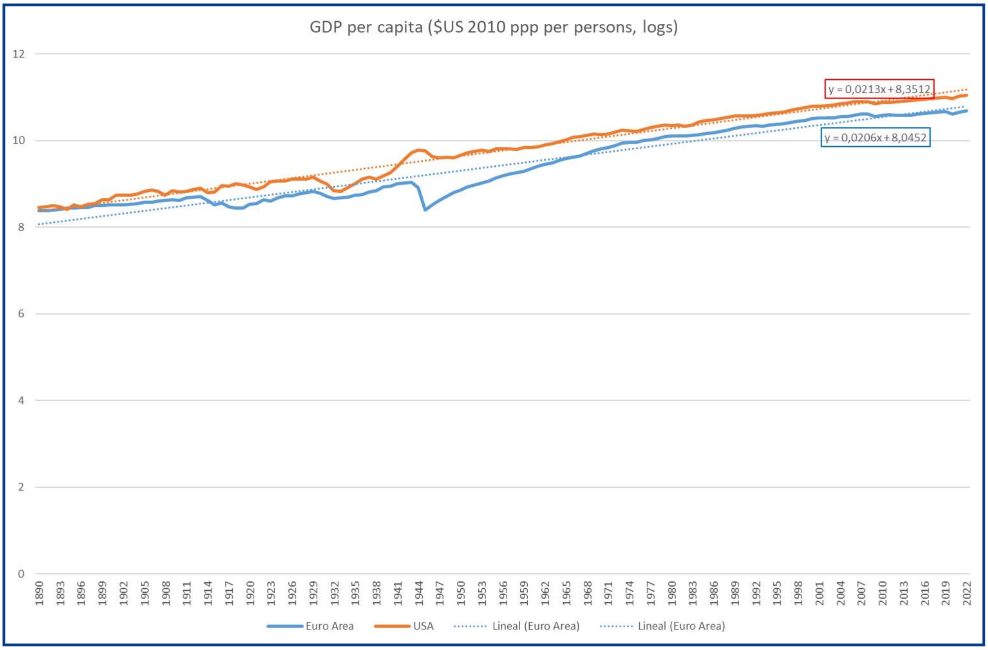
Land transportation	H49
Water transport	H50
Air transport	H51
Warehousing and support activities for transportation	H52
Postal and Courier activities	H53
Accomodation and Food Service Activities	I
Information and Communication	J
Publishing, motion pictures, and broadcasting services	J58-J60
Telecomunications	J61
Computer programming, Consultancy, and Information Services	J62-J63
Finance and Insurance Activities	K
Real State Activities	L
Buying and Selling of Own Real State	L68A
Professional, Scientific, and Technical Activities	M
Professional, Scientific, Technical Activities, and Administrative and Support Service Activities	M-N
Marketing	MARKT
Marketing and Advertising Agencies	MARKTxAG
Administrative Support Services	N
Public Administration and Defense; Compulsory Social Security	O
Public Adminsitration, Education and Health	O-Q
Education	P
Health	Q
Human Health Activities	Q86
Residential Care and Social Work Activities	Q87-Q88
Arts, Entertainment, and Recreation	R
Arts, Entertainment, Recreation, and Other Service Activities	R-S
Other Service Activities	S
Household and Domestic Services	T
Total	TOT
Total_Manufacturing	TOT_IND
Activities of Terriotorial Organizations	U

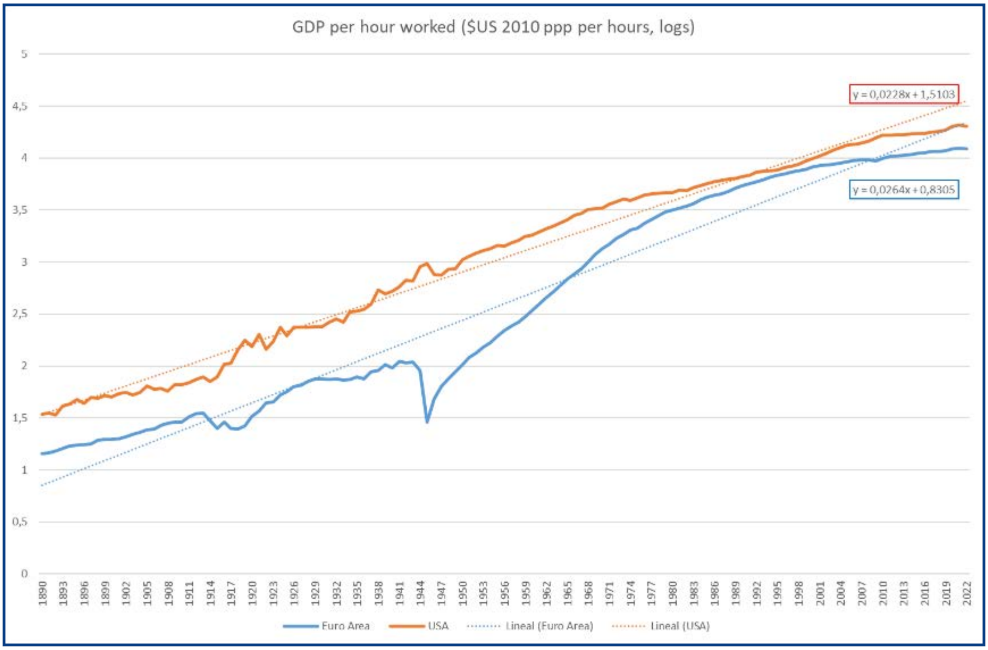
Table 1. Growth accounting, pp, 1996-2021.
Eurozone-4 (Germany, France, Italy, and Spain) and USA

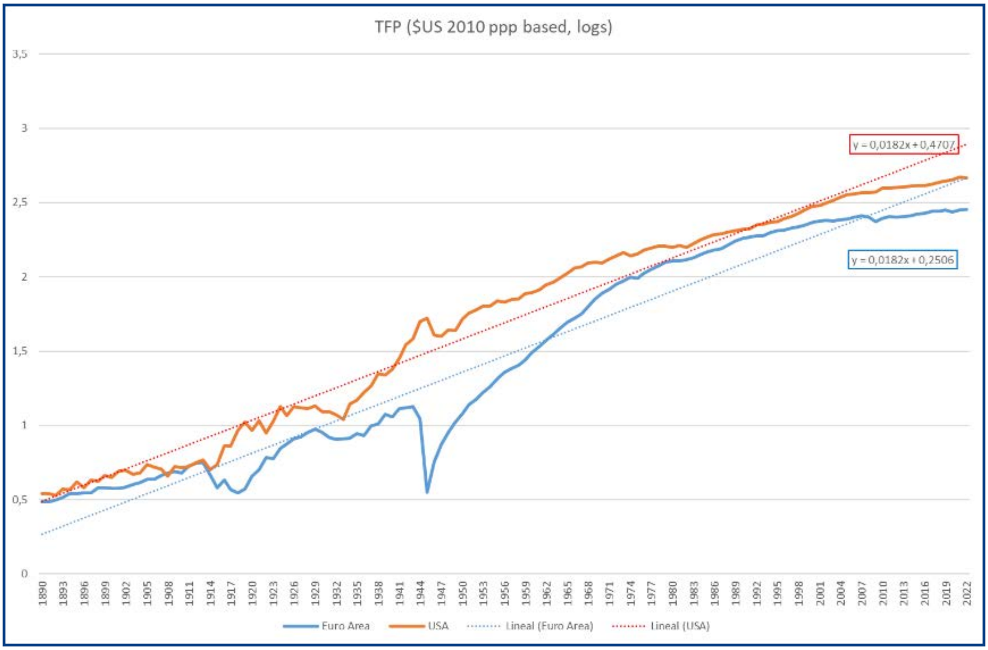
	Eurozone-4			USA		
	1996-2021	1996-2007	2008-2021	1996-2021	1996-2007	2008-2021
GDP growth rate	1,6	1,7	0,7	2.8	3.7	2
Labor input (Hours)	0,4	0,2	0,0	0,4	0,6	0,1
Labor input (Composition)	0,2	0,2	0,3	0,2	0,2	0,3
Capital-Tangible ICT	0,0	0,0	0,0	0,2	0,4	0,1
Capital-Tangible NICT	0,5	0,5	0,2	0,5	0,6	0,3
Capital-Intangible	0,3	0,3	0,3	0,7	0,6	0,7
TFP	0,1	0,5	-0,1	0,9	1,4	0,4

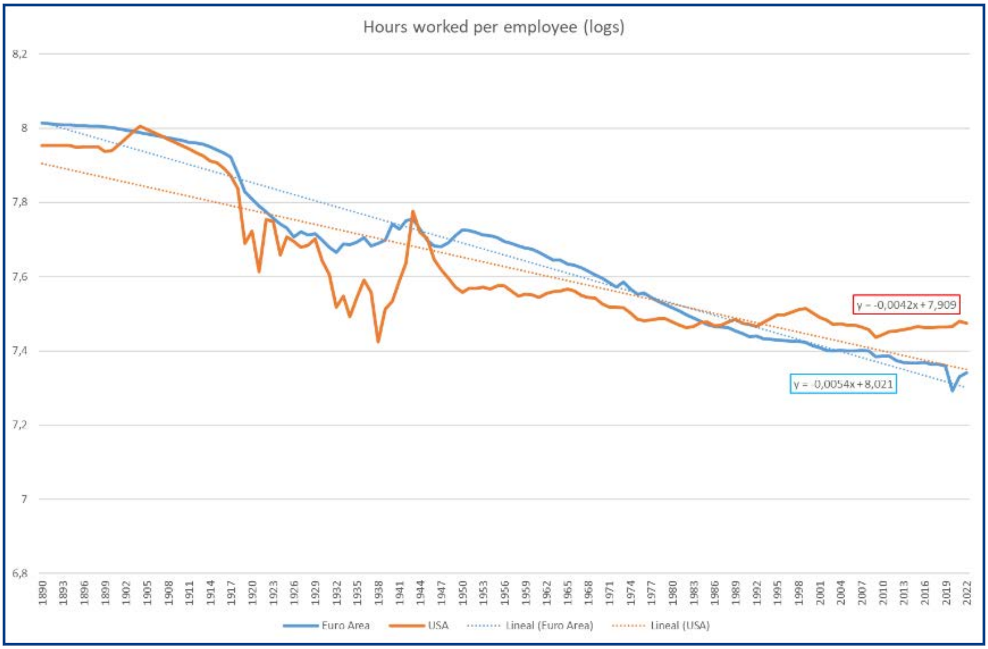
Source: EUKLEMS-INTANProd Database. https://euklems-intanprod-llee.luiss.it/

Figure 1. GDP per capita, Hours worked per employee, Labour Productivity and Total Factor Productivity



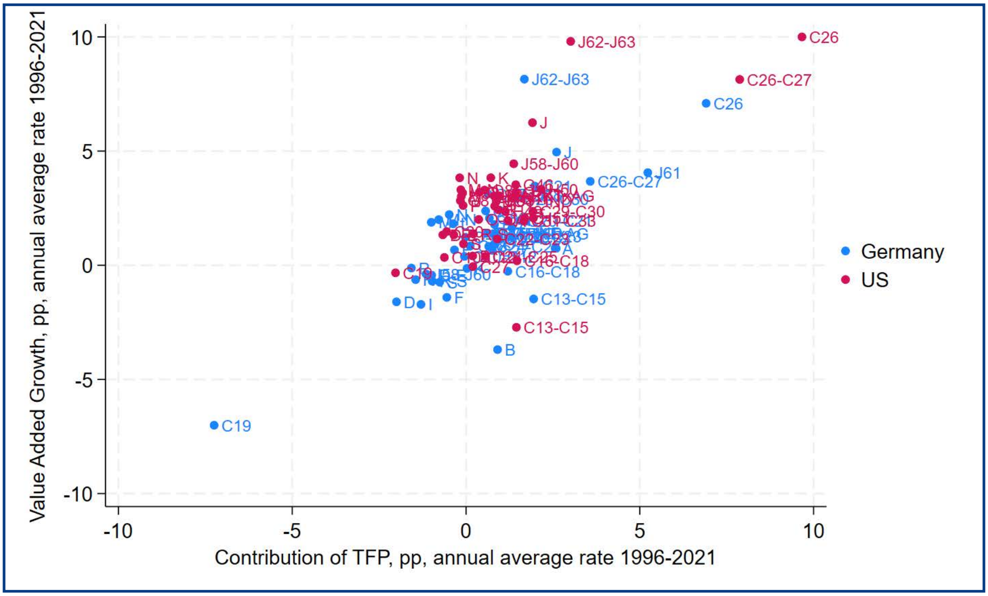


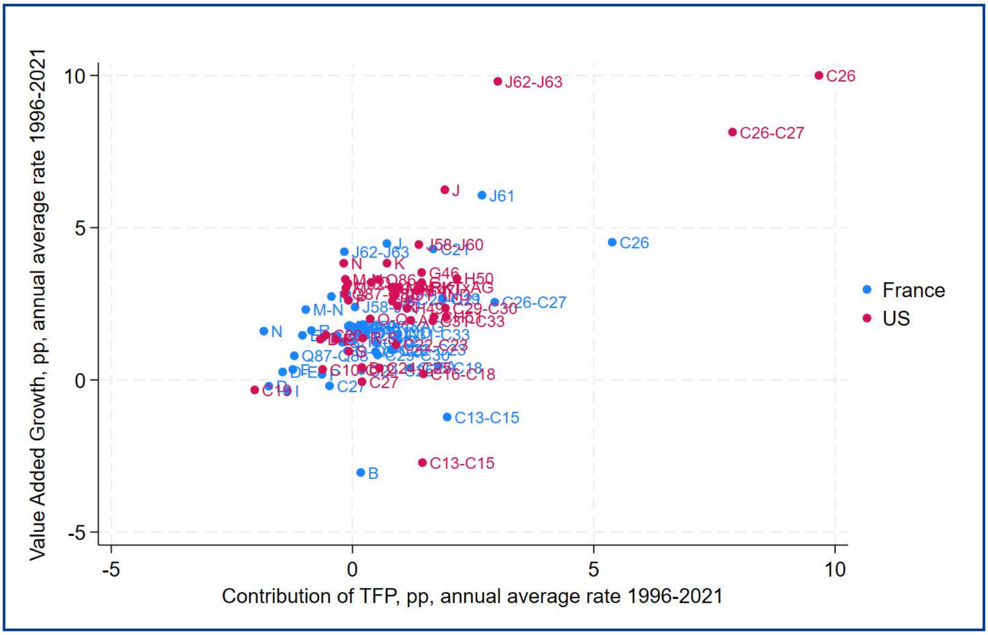


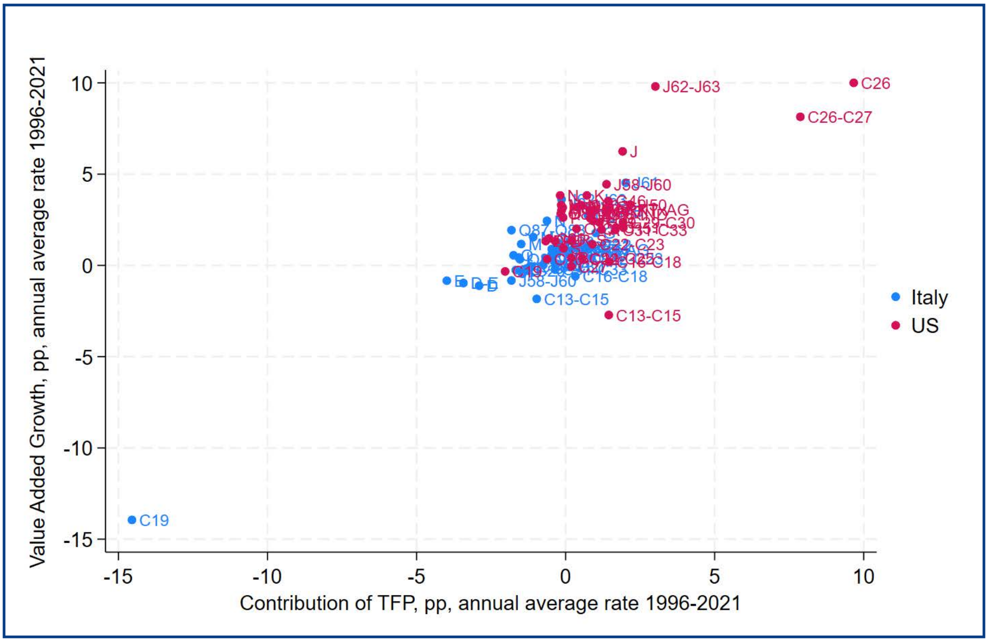


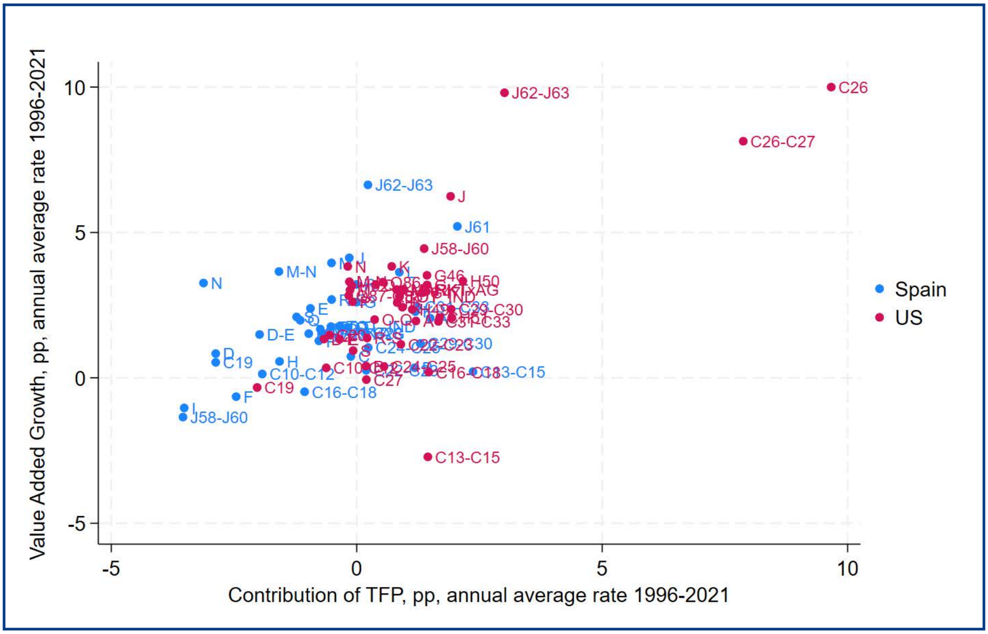
Source: http://www.longtermproductivity.com/

Figure 2. Growth and Contribution of TFP by sectors of activity, pp, 1996-2021. USA, Germany, France, Italy, and Spain.



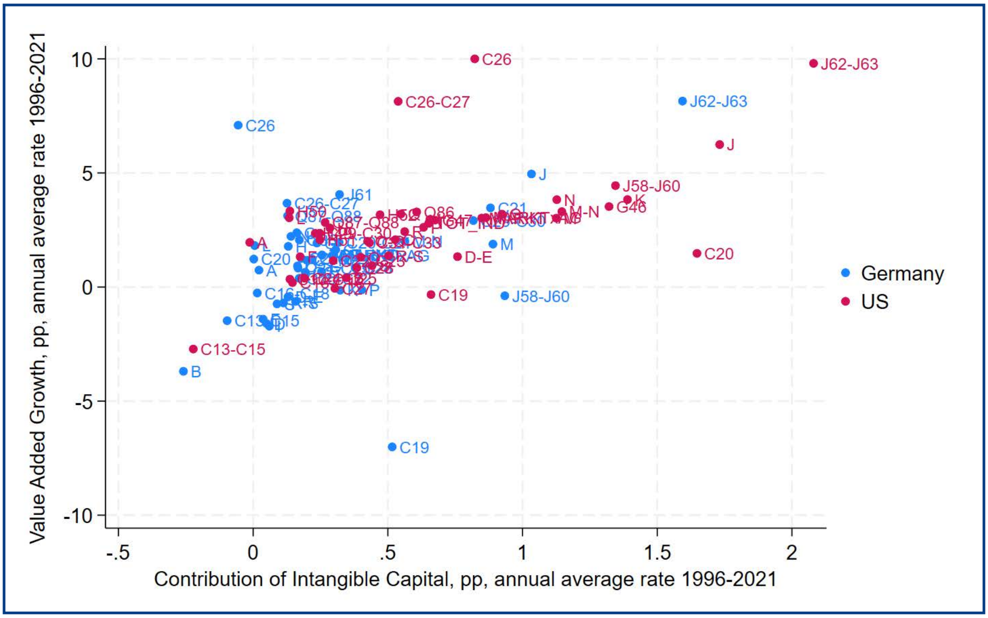


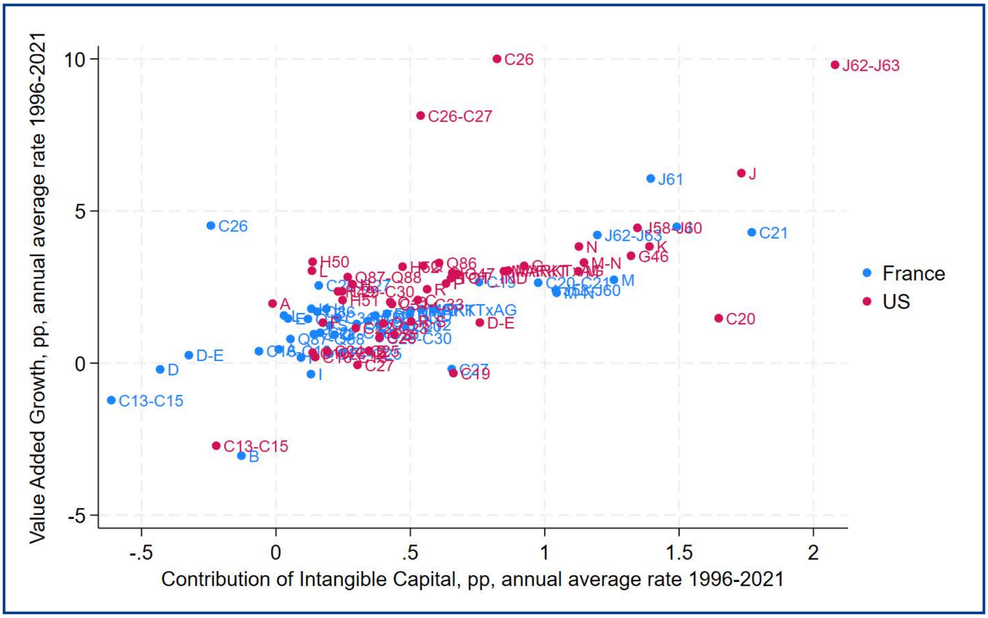


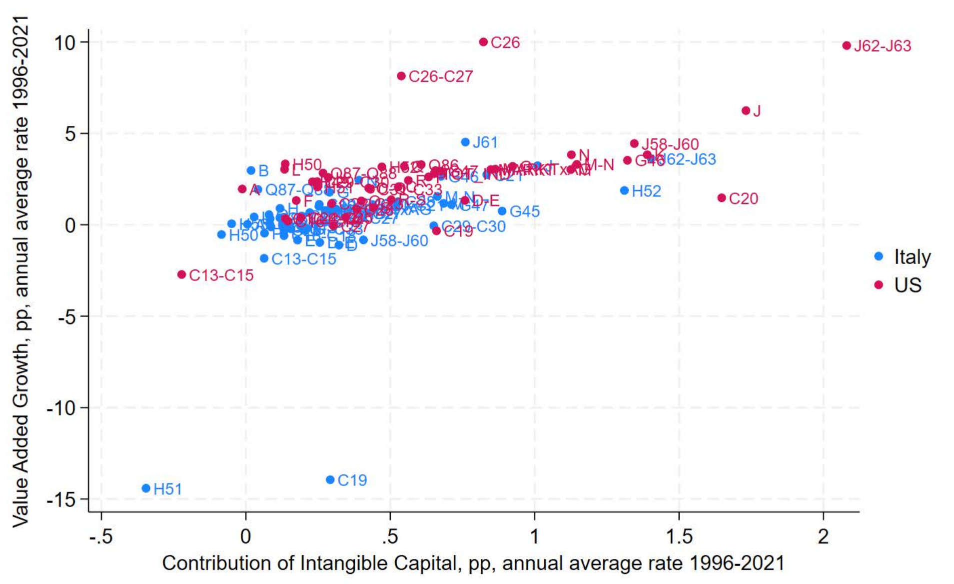


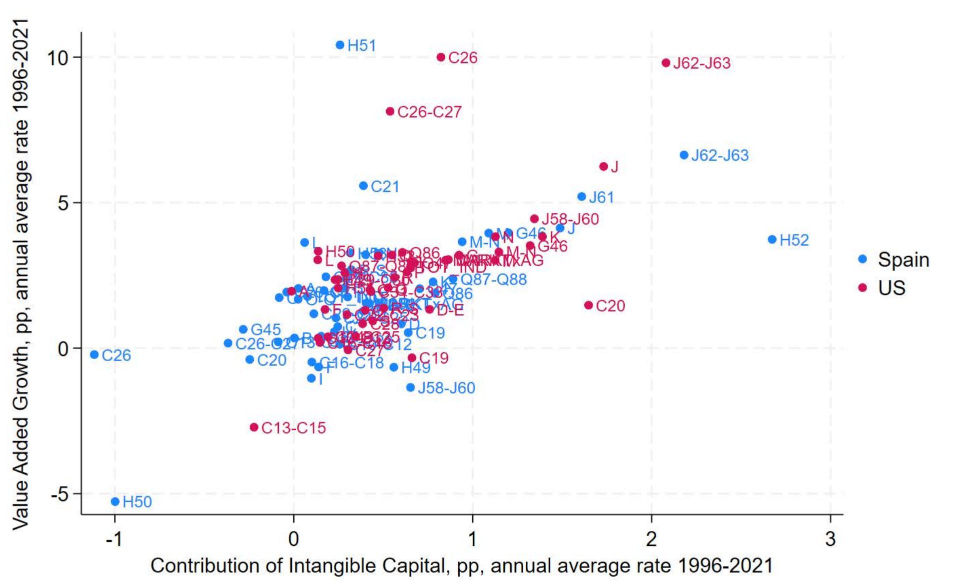
Source: EUKLEMS-INTANProd Database. https://euklems-intanprod-llee.luiss.it/

Figure 3. Growth and Contribution of Intangible Capital by sectors of activity, pp, 1996-2021. USA, Germany, France, Italy, and Spain.



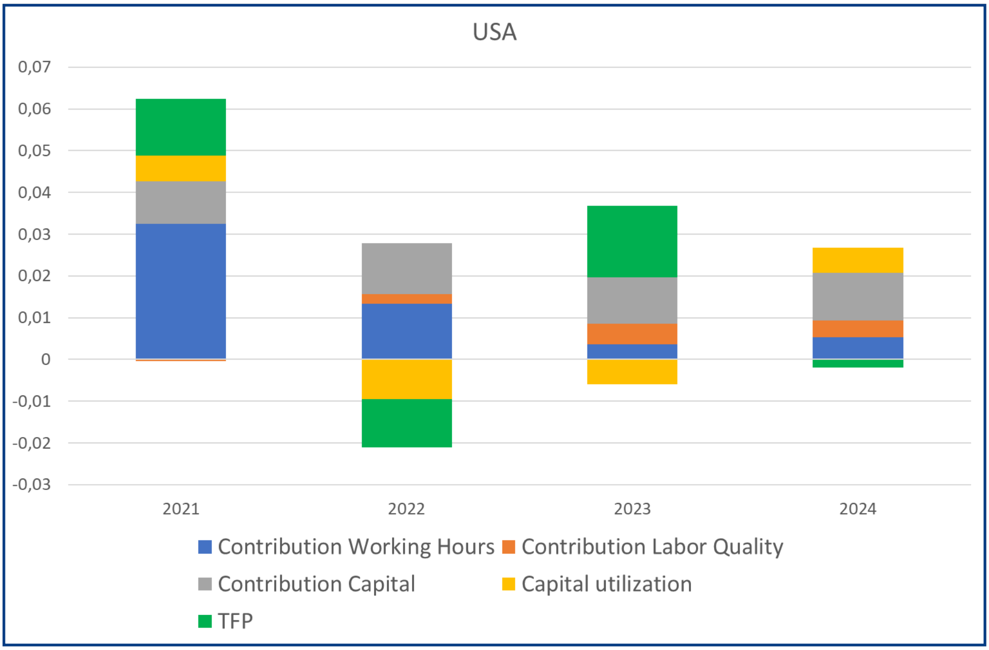


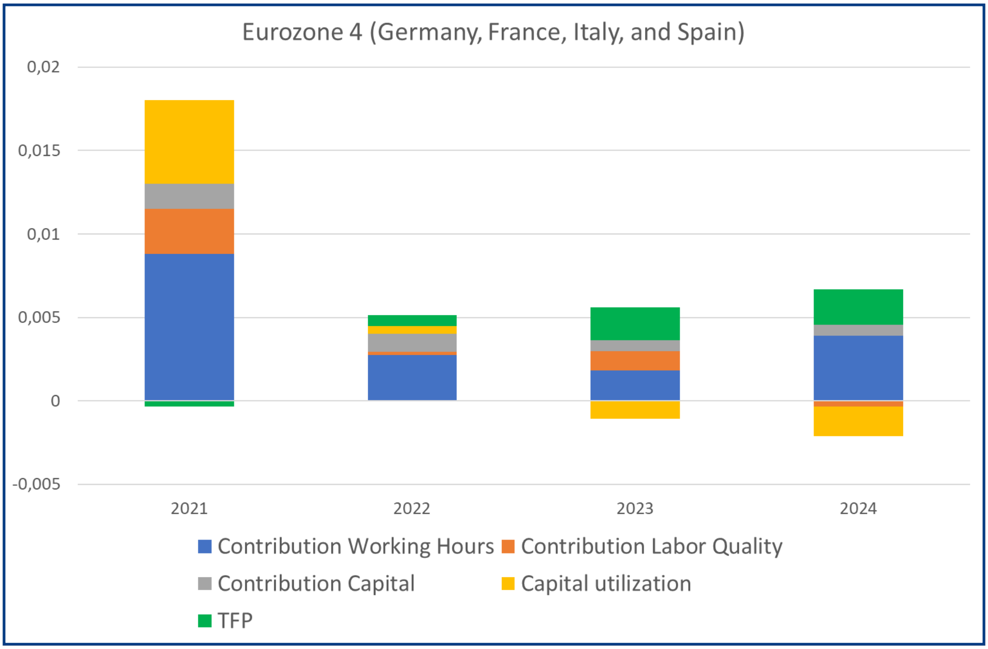




Source: EUKLEMS-INTANProd Database. https://euklems-intanprod-llee.luiss.it/

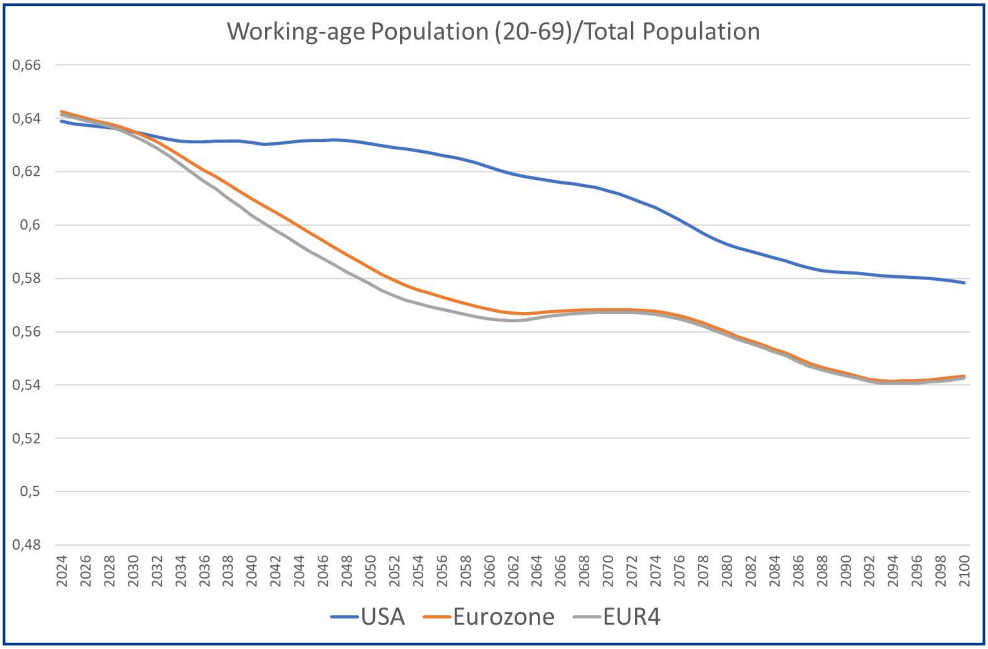
Figure 4. Decomposition of GDP growth, 2021-2024.

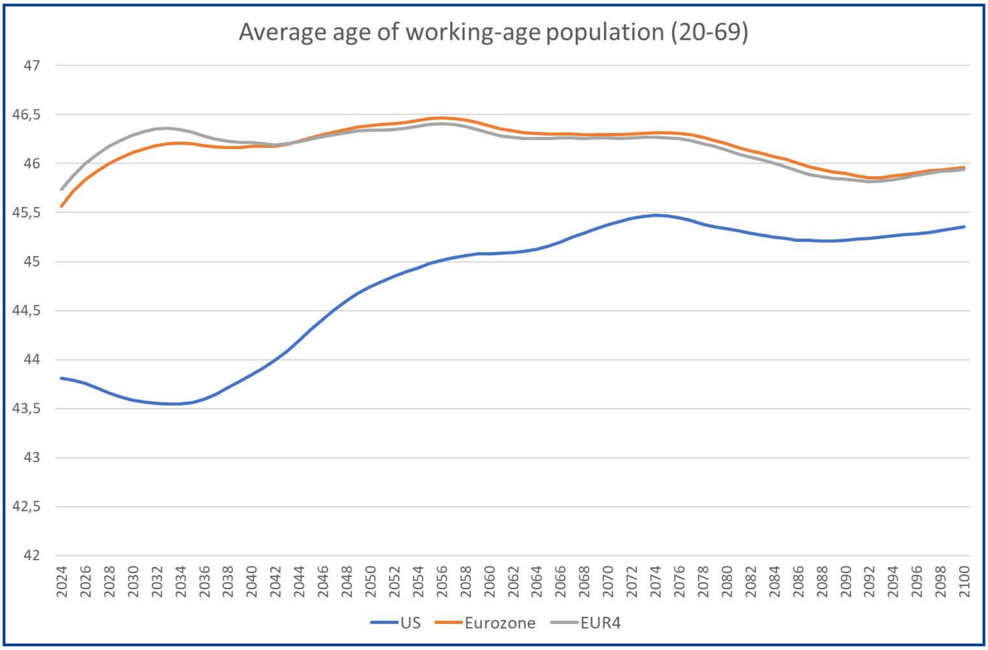


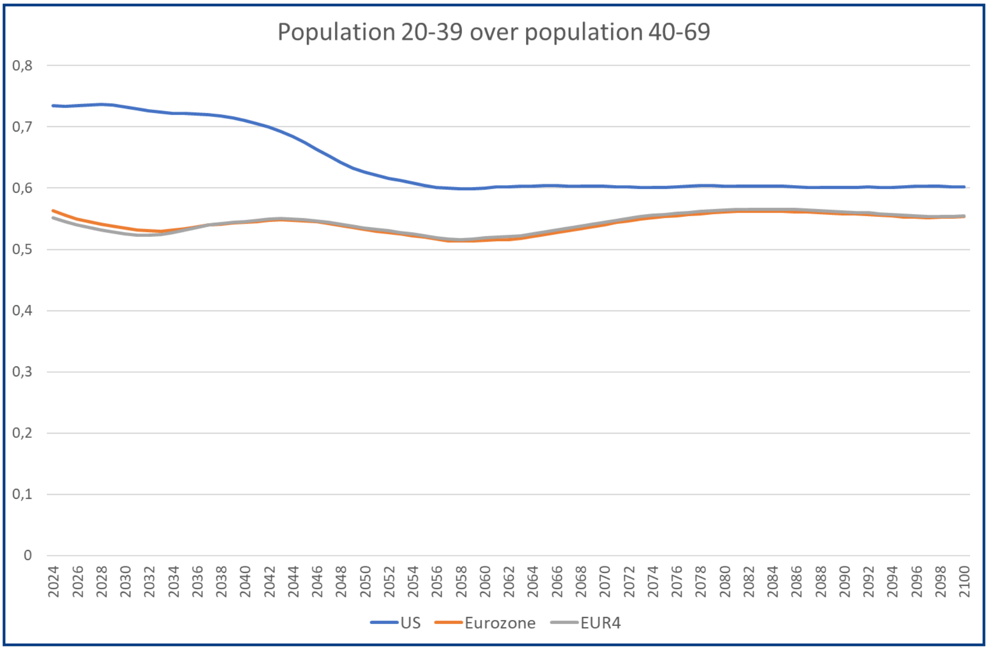


Sources: For the USA, https://www.johnfernald.net/TFP; for Eurone-4, https://www.bde.es/wbe/en/areas-actuacion/analisis-e-investigacion/recursos/europrod-ua.html

Figure 5. Forecasts of the age structure of the population, 2024-2100, Eurozone and USA.







Source: Author´s computations from data at https://population.un.org/wpp/ *. The graphs plot the data obtained in the lower 80 percentile of the prediction interval produced by UN Population Division.*

3. REFLECTIONS FROM THE LAST INFLATIONARY EPISODE

Pablo Hernández de Cos
Former Governor Bank of Spain

EXECUTIVE SUMMARY

Since mid-2021, the euro-area economy has gone through several shocks, leading to the highest inflation since the creation of the European Monetary Union. A forceful and persistent response from the European Central Bank, grounded in the monetary policy framework it agreed in 2021 ahead of the inflationary episode, has succeeded in bringing inflation down and delivering on the central bank's price-stability mandate. The framework will be reviewed in 2025 and it might conclude that there is no need for a drastic change.

Nevertheless, this assessment should be compatible with identifying some areas for improvement. In particular, the 2021 review was primary focused on the effective lower bound. The recent inflationary episode, together with high ongoing uncertainty, indicate that the articulation of monetary policy strategy frameworks should be robust to very different scenarios.

Likely persistence of high levels of uncertainty over the next few years will also require an emphasis on flexibility to adapt to the magnitude, origin and persistence of shocks. Unconditional forward guidance should be avoided. In addition, there might be a need to more clearly distinguish in the future, when possible, between quantitative easing for market functioning versus monetary stimulus, which could incentivise a careful assessment of the amount, duration and structure of any asset purchase programme.

Communication also needs to be improved with regards to the level of uncertainty and its consequences for monetary policymaking with, for instance, indicate that the articulation of monetary policy strategy frameworks should be robust. Improving forecasting/modelling tools, in particular when dealing with large supply shocks, and understanding the role of different measures of inflation expectations should also be priorities.

1. INTRODUCTION

The 1992 Maastricht Treaty gave the European Central Bank (ECB) the primary task of ensuring price stability in the euro area, while leaving to the ECB the exact definition of 'price stability' and the framework by which to achieve it – what is known as monetary policy strategy. In July 2021, the ECB approved its last monetary policy strategy review (ECB, 2021a, 2021b, 2021c). Its main content could be summarised as follows:

- First, the macro context was at that time characterised by a prolonged period of below-target inflation and a low natural rate of interest (r*)[1], arising from low productivity, demographics and the consequences of the global financial crisis. In this context, a major concern was the risk of interest rates hitting the lower bound frequently.
- Second, the earlier inflation objective ("below, but close to, 2 % over the medium term") was replaced by a 2 percent symmetric target in the medium term.
- Third, this symmetry was considered to require an especially forceful or persistent monetary policy response when the economy was close to the lower bound, to avoid negative deviations from the inflation target becoming entrenched, which may also imply a period in which inflation is moderately above target.
- Fourth, interest rates were considered the primary monetary policy instrument but, in recognition of the lower bound, the use of forward guidance (FG), quantitative easing (QE) and long-term refinancing operations ((T)LTROs[2]) were considered appropriate.
- Fifth, financial stability is a pre-condition for price stability (and vice versa). Thus, financial stability considerations should be incorporated into monetary policy deliberations[3].
- Sixth, the interaction between monetary and fiscal policy is considered important and, in proximity to the lower bound, countercyclical fiscal policy was considered particularly effective.

The ECB also announced that it would assess periodically the appropriateness of its monetary policy strategy, with the next assessment expected in 2025.

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[1] The natural rate of interest, r*, can be defined as the real rate of interest that is neither expansionary nor contractionary.

[2] LTROs are long-term refinancing operations with maturity beyond three months (which is a standard mainstay of the ECB operating framework) and TLTROs are a targeted variant in which liquidity is provided on particularly attractive terms with the condition that the liquidity be lent on to the real economy.

[3] The new strategy also ended with the two pillars by stating that the Governing Council would adopt "an integrated assessment of all relevant factors. This assessment builds on two interdependent analyses: the economic analysis and the monetary and financial analysis. Within this framework, the economic analysis focuses on real and nominal economic developments, whereas the monetary and financial analysis examines monetary and financial indicators, with a focus on the operation of the monetary transmission mechanism and the possible risks to medium-term price stability from financial imbalances and monetary factors. The pervasive role of macro-financial linkages in economic, monetary and financial developments requires that the interdependencies across the two analyses are fully incorporated" (ECB, 2021a).

Since mid-2021, the euro-area economy has gone through several shocks, leading to the highest inflation since the creation of the European Monetary Union followed by the largest and swiftest increase in interest rates. Even today, although inflation has declined significantly since its peak, it remains above 2 percent, and interest rates are higher than those prevailing in 2021 and before the COVID-19 pandemic.

This paper reflects on these developments ahead of the ECB's 2025 monetary policy review. In the subsequent sections it deals in turn with the six aspects of the 2021 review summarised above: the macro context, the definition of price stability, the reaction function, the policy tools, the relationship between financial stability and monetary policy, and the interactions between fiscal and monetary policy.

2. THE MACRO CONTEXT AND HOW IT HAS CHANGED

The period since 2021 has been characterised by very high and persistent inflation, followed by a disinflationary process. The inflation surge was caused by a series of exceptional shocks. The COVID-19 pandemic starting in early 2020 led to lockdowns that undermined the global supply system. In early 2021, as economies reopened, inflationary pressures emerged when the release of pent-up demand and excess savings that had accumulated during the pandemic (underpinned by synchronised and highly expansionary monetary and fiscal policies around the globe) confronted a supply system severely affected by restrictions and bottlenecks in global value chains. This demand-supply mismatch rapidly impacted the prices of manufacturing products, transportation and commodities. In addition, energy prices increased rapidly from mid-2021, along with the economic recovery, but also because of problems with French nuclear power plants, compromised hydropower generation because of the warm and dry summer and a reduced supply of Russian gas to Europe.

Inflationary pressures gathered pace in 2022, exacerbated by the impact of the full-scale Russian invasion of Ukraine on energy and other commodity markets. As a net energy importer, the euro area was particularly exposed to this shock, which emerged as the main factor behind the inflation surge. Other commodities, including food (for which energy and energy-intensive products such as fertilisers are important production inputs), were also affected, spreading the inflationary pressures.

For much of 2021 and 2022, these factors were further compounded by a depreciation of the euro. In addition, the indirect effects of energy cost increases and supply-chain bottlenecks led to a steady increase in non-energy industrial goods and services inflation.

In late 2022, inflation turned downwards, supported initially by a sharp energy inflation correction, and over time by the effects of monetary policy tightening and the gradual unwinding of adverse supply shocks.

Several characteristics of these developments deserve emphasis.

First, forecasting inflation during this period has been very challenging, even over the short-term. Large and rising positive errors were observed until the second quarter of 2022, shortly after Russia's invasion of Ukraine[4]. Forecast errors then began to decline, especially during 2023, coinciding with the disinflationary process, when errors became small and even slipped into negative territory at times. Forecast errors have remained relatively small since then.

To analyse the origin of these errors, those derived from external or technical assumptions, which ECB staff use as conditioning assumptions, should be identified. For example, commodity prices and interest-rate projections follow market expectations at the time of the projection cut-off date, and bilateral exchange rates are assumed to remain at the average level prevailing during the ten working days before the cut-off date.

To isolate their significance, counterfactual paths for inflation can be constructed using models under the assumption that forecasters had perfect foresight about the path of conditioning variables. Such an exercise suggests that about 70 percent of forecast errors for inflation during 2021 and 2022 resulted from errors in the technical assumptions[5]. Initially the underprediction of inflation mainly reflected upward surprises related to the dramatic increase in energy prices[6]. In early 2022, food prices started to play a significant role as well, while the speed and intensity with which energy and food inflation passed through to core inflation was higher than expected. In 2023, the role of energy prices was also significant, but in the opposite direction, contributing to an overprediction of inflation[7].Even after controlling for errors in technical assumptions, forecast errors are positive and account for around 30 percent of total inflation errors during the period 2020 Q4-2023 Q3[8]. This suggests that forecasting models struggled to capture how the large shocks observed were transmitted to inflation. This finding was also observed in other jurisdictions[9].

Econometric evidence and simulation exercises show that standard linear forecast models do not properly capture the transmission of large commodity price shocks to non-energy inflation[10.] One possible explanation for these non-linearities is that, when facing large shocks to their input costs, firms tend to update their prices more frequently and hence pass on the cost increases more quickly to selling prices[11]. The strong

[4] With Eurosystem/ECB staff forecasts broadly in the middle of the range of projections; see Lane (2024a).

[5] Based on the use of the so-called Basic Model Elasticities (BMEs), which summarise the unconditional dynamics responses of variables across models used by national central banks and ECB staff.

[6] In addition to energy prices, supply bottlenecks also contributed to inflation forecast errors, especially in the second half of 2021.

[7] For a comprehensive analysis and monitoring of Eurosystem forecast errors during this period, see Chahad *et al* (2022, 2023 and 2024).

[8] Similarly, Lane (2024a) estimated the decomposition of the eight-percentage-point projection error in the fourth quarter of 2022 relative to what was projected in December 2021, and showed that around half was due to unexpected developments in oil and gas prices, and nearly one third to errors in food inflation.

[9] See, for instance, Koch *et al* (2023) for a worldwide analysis, or Kryvtsov *et al* (2023) and Reserve Bank of Australia (2022), among others, for country-specific analyses.

[10] As can be seen from simulation exercises for energy shocks in Burriel *et al* (2024) and González Mínguez *et al* (2023), and for food shocks in Borrallo *et al* (2024).

[11] See Lagarde (2025). In a model with state-dependent price-setting, Costain *et al* (2022) showed how firms increase their frequency of price changes when inflation is higher. Empirically, analysis of the microdata

demand for contact-intensive services (tourism, hospitality) after the reopening of the economy could have amplified these non-linearities. The rapid increase of short-term inflation expectations after the inflation spike could have also played a role.

A second related point concerns the nature of the shocks that dominated the inflation surge. The main drivers of inflation in the euro area were supply-side shocks (Arce *et al*, 2024; Banbura *et al*, 2024; Kataryniuk *et al*, 2024), whereas in the United States, inflation was dominated by demand-side forces.

Importantly, most of these supply shocks were of a global nature (pandemic related, war in Ukraine). There were also significant sectoral shifts. Initially lockdowns and supply-chain disruptions moved demand toward goods. Later the reopening of the economy led to a strong demand for contact-intensive services. In contrast, labour-market tightness played a comparatively minor role, although the lagged adjustment of wages (and prices) to the initial inflation shock generated persistent services inflation (Arce *et al*, 2024; IMF, 2024).

All these developments illustrate the high level of uncertainty that continues to prevail. This leads to a third point: how this uncertainty affects the estimates of r* and how it influences its usefulness in guiding monetary policy.

Tracking long-term trends in r* is important to quantify how frequently short-term interest rates may hit the lower bound. Indeed, this was one of the main motivations behind the ECB's 2021 strategy review. Most recent estimates of r* suggest that its level remains low compared to the period prior to the Global Financial Crisis (Williams, 2023; Brand *et al*, 2025). Estimates for the euro area show a median increase of around 30 basis points since mid-2019, with a range from about minus half of a percentage point (pp) to around half a pp. Thus, notwithstanding arguments that may justify an increase in r* (such as the exceptional investment financing needs arising from structural challenges related to the climate transition, the digital transformation and geopolitical shifts), those estimates still point to the risk that nominal interest rates might become constrained by the effective lower bound.

However, the high level of uncertainty associated with estimating r* should be highlighted. The current range of estimates implies nominal rates (ie real natural rate plus 2 percent inflation) ranging from 1.75 percent to 2.25 percent[12] and each of these point estimates comes with a significant margin of error (Laubach and Williams, 2003; Brand *et al*, 2025). The high level of uncertainty stems from more than methodological challenges. The long-term evolution of the fundamentals that determine r*, such as productivity growth, demographics, fiscal positions, geopolitical shifts and climate change, is extremely hard to predict, even directionally in some cases.

For regular policymaking, levels of interest rates are compared to the level of r* to determine how contractionary/expansionary monetary policy is. However, in a context of high uncertainty about the level of r*, the evidence stresses that the previous rate

on consumer prices reveals a notable increase in price adjustment frequencies during the inflationary episode (Gutiérrez *et al*, 2024; Gautier *et al*, 2023; Dedola *et al*, 2024).

[12] For further details, see Brand *et al* (2024, 2025).

should serve as the primary reference point to mitigate the impact on r* of estimation errors (Orphanides and Williams, 2002). This approach also advocates for gradual adjustments in the policy rate, driven by estimated inflation and output gaps. In such a context, when central banks announce their decisions, they gain valuable insight into whether they have surprised financial markets and, if so, the extent to which these surprises impact inflation and economic activity expectations (Gürkaynak *et al*, 2005; Swanson, 2021). A careful interpretation of these signals often proves to be the most effective tool for assessing the stance of monetary policy (Schnabel, 2024b).

All in all, a first conclusion that can be drawn is that any monetary policy strategy should be designed (and communicated) to guarantee robustness to very different scenarios[13]. The 2021 ECB strategy framework has proven able to deal successfully with a completely different context to that which prevailed in the previous decade and prompted the review. However, the communication of the review was very much focused on the risk of interest rates hitting the lower bound in a context of very low inflation. Experience since then would justify communication of the new strategy review in a more general way, emphasising the capacity of the framework to cover different inflation scenarios.

A second conclusion is related to macroeconomic analysis and forecasting. Given the importance of inflation forecast for inflation targeting, central banks should endeavour to improve their ability to forecast how various shocks, in particular large ones, are passed through to inflation (Lagarde, 2025). This is particularly relevant for supply shocks. Supply-side shocks are more difficult to anticipate and can have very different effects on wages and inflation than shocks triggered by changes in aggregate demand, making inflation targeting more challenging. There are also reasons to believe that supply shocks may become more frequent (Lagarde, 2023), related for example to climate change, population ageing, artificial intelligence and/or changes in globalisation.

A deeper analysis of global/external and sectoral shocks and how this can be incorporated into forecasting tools should also be a priority (Forbes *et al*, 2025). When shocks are external, domestic inflation may be affected in the medium run by the impact of the terms-of-trade shock on aggregate demand (Villeroy de Galhau, 2024a). Moreover, the pandemic highlighted the importance of specific goods and sectors, which could cause shifts in the composition of production and demand and lead to differential impacts on inflation compared to more economy-wide shocks.

The ECB is already taking steps in that direction, not only by revising traditional models, but also by developing complementary tools, including specific models for certain components, such as commodities, and new techniques, such as non-linear econometric models[14].

A third lesson relates to the need to consider uncertainty around the baseline pro-

[13] For a similar conclusion for the US, see Romer and Romer (2024a).

[14] Indeed, the 2021 ECB strategy review analysed the role of models and came to similar conclusions (ECB, 2021d).

jections (Schnabel, 2024a; Lane, 2024c). Uncertainty is taken into account in monetary policymaking in different ways, including through risk analysis tools such as fan charts[15], subjective probability distributions or model-based risk analysis (based on macro-at-risk models) and/or alternative scenarios (characterised, for example, by paths for key external assumptions that differ from those in the baseline). The challenge is how to communicate this uncertainty to the outside world. Communicating in a clear manner the outlook, the risk assessment and the policy reaction can enhance the effectiveness of monetary policy, tempering volatility and facilitating the stabilisation of inflation expectations (Williams, 2024).

To provide more clarity on their reaction function, some central banks publish the interest rate path that would allow the inflation target to be met, as compared to the market-implied interest-rate curve used in the baseline projection[16]. The Federal Reserve System publishes the expected path of voting members (the so called 'dot plot'), the distribution of which could be seen as providing the uncertainty they attach to the baseline. However, the evidence shows that, although interest-rate projections provide additional information to macroeconomic projections, they have not significantly improved market understanding of central banks' reaction functions. And dot plots are not always easy to interpret and can contradict the message the central bank sends through other channels.

As stressed by recent external evaluations of central banks' forecasting procedures, a better way forward to communicate on risks would be to make greater use of alternative scenarios and sensitivity analyses[17]. The ECB has already moved in this direction (Lane, 2024a). However, the publication of these scenarios should not be done in a rigid manner, which could dilute the focus on the baseline and make communication more difficult. The key is to communicate more about risk and uncertainty, while admitting the limitations of any individual approach.

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[15] Fan charts with ranges around the baseline are built based on past forecast errors, each range representing prediction intervals at different probabilities and therefore indicating the probability that future observations will fall within these ranges if the typical shocks from the past, excluding exceptional events, were to occur again. In most cases, however, the distribution around the baseline is assumed to be perfectly symmetrical, so no information is provided on the balance of risks and so-called Knightian uncertainty is ruled out. It is a pure statistical tool that also lacks an explanation for the underlying drivers of uncertainty.

[16] As mentioned above, the Eurosystem uses the interest rate implied by financial market prices on a specific cut-off day as a conditioning assumption for its macroeconomic projections. Thus, markets should expect policy to deviate from the market-implied path if the medium-term inflation forecast is inconsistent with the target (Schnabel, 2024a), although the link between policy decisions and inflation projections is diluted given that projections are 'owned' by staff and not the Governing Council. In any case, markets can compare the exogenous path for the policy rate with actual monetary policy decisions, in order to gain insights into the reaction function (Nagell, 2024).

[17] See Milesi-Ferretti *et al* (2023) for an independent review of the Banco de España's macroeconomic projections, and Bernanke (2024) for an independent review of the Bank of England's economic forecasting.

3. THE DEFINITION OF PRICE STABILITY

The symmetric, medium-term 2 percent inflation target was one of the key innovations in the last ECB strategy review. From a theoretical point of view, the optimal inflation rate can vary over time, which should lead to the target being reviewed regularly (Adam *et al*, 2019). However, the communication challenge associated with changing the target should set the bar for such a change very high. In the current case, the high inflation episode and the potential increase in r* since 2021 should undercut the case for an increase in the target advocated by some economists at that time (Reichlin *et al*, 2021, 2024).

Moreover, given the potential increase in the volatility of inflation associated with more shocks and uncertainty, consideration could be given to moving from a point target to inflation bands. Bands could reduce the risk of overreacting to small changes in inflation[18], signal that the inflation target is pursued with the flexibility required for absorbing temporary shocks, and help to communicate that the central bank has imprecise and uncertain control over the inflation process (Cœuré, 2019).

The comparison between bands and point targets was analysed in the 2021 review (ECB, 2021e). Three elements of the 2021 conclusions bear emphasis and should lead to the current point target being retained.

First, bands could reduce the strong anchoring signal of a point target, in particular if interpreted as indifference ranges, indicating that the central bank will not respond to inflation deviations within that range. The scarce empirical evidence shows that a band or a range over which the central bank is indifferent has a (marginally) weaker commitment to the midpoint over the longer run.

Second, initial conditions may matter. If the central bank has been undershooting/overshooting the inflation objective for some time when introducing bands, bands can be interpreted as accepting the low/high observed inflation. This is relevant for the current discussion since inflation has been above 2 percent since 2022.

Third, bands can lead to stronger monetary policy reactions once the limits of the bands are exceeded, and can therefore lead to greater output volatility (Le Bihan *et al*, 2023).

The medium-term horizon of price stability should be maintained since it precisely permits the uncertainty on the origin, magnitude and persistence of the shocks, and on the transmission of monetary policy, to be taken into account. As to its duration, the ECB's definition of the medium-term should be flexible, allowing patience when confronted with temporary shocks that may dissipate on their own, thus avoiding unnecessary economic volatility[19].

Of course, projecting medium-term inflation is particularly difficult in a context of high uncertainty. The ECB's emphasis in recent years on measures of underlying

[18] Some central banks, such as in the UK and Canada, follow targets with an explicit tolerance band. The Swiss national bank targets an inflation band, for which they express indifference.

[19] On this argument, see Reichlin *et al* (2024).

inflation – including new definitions that take into account the influence of the extraordinary shocks[20] – is particularly appropriate, since these measures filter out the short-term volatility in headline inflation and therefore capture better where headline inflation is likely to settle, once temporary factors have dissipated. Since underlying inflation is not observable, using a range of measures is key, the range being an indicator of uncertainty. It is also welcome how the ECB has strengthened its monitoring of wages and mark-ups[21] as key determinants of domestic inflation and therefore of the potential persistence of shocks[22].

Finally, the current symmetry of the target also seems particularly important in a context of diverse shocks hitting the economy from different directions. Symmetry should be understood as both negative and positive deviations from 2 percent being equally undesirable.

All in all, there is a clear case for maintaining the current definition of price stability.

4. THE REACTION FUNCTION

The nature of the shocks that drive inflation determines how central banks respond to those shocks. The 2021 ECB Strategy Review stated: "As different types of shock may move inflation and real economic activity in the same direction (as in the case of demand shocks) or create a temporary trade-off (as in the case of supply shocks), the medium-term orientation provides the policy flexibility to assess the origin of shocks and look through temporary shocks that may dissipate of their own accord, thus avoiding unnecessary volatility in activity and employment" (ECB, 2021c).

This paragraph encapsulates two key considerations when confronting adverse supply shocks.

First, in the face of a negative supply shock, inflation increases while output typically falls. That introduces a meaningful trade-off for monetary policy: an aggressive reaction may produce an excessive contraction in economic activity. That justifies greater patience[23.]

Second, patience does not mean inaction. Whether a central bank should look through temporary supply shocks hinges critically on whether such shocks are expected to have (or not) a temporary effect on inflation.

Consider a stylised shock that creates a one-off change in the price level, that is, a spike in inflation that dissipates quickly. If the central bank tightens monetary policy, it

[20] The standard set of underlying inflation measures has become less informative in recent years given the exceptional shocks affecting the economy. Thus, ECB staff developed 'adjusted' measures that filtered out the exceptional influences from these shocks.

[21] For an analysis of the role of mark-ups, see Hann (2023).

[22] The so called 'wage tracker' is focused on identifying current and future wage pressures using granular data from collective bargaining agreements in several countries, information that is timelier than other wage-growth indicators. See Bates *et al* (2024) for more details.

[23] For further development of this point, see Guerrieri *et al* (2023) and Tenreyro *et al* (2023).

may affect inflation long after the inflationary effects of the shock have vanished, and could lead to more inflation volatility and to unnecessary declines in activity and employment. However, in case the negative supply shock has persistent effects, by raising interest rates, the central bank can reduce the inflation deviation from target not only during the inflation spike, but also after it. Thus, an active monetary policy response could generate less inflation volatility than an alternative 'looking-through' policy. In addition, this reaction could be particularly important to avoid a de-anchoring of inflation expectations[24].

In practice, central banks do not know how persistent a given supply shock will be. Nor do they know whether a supply shock will be followed by another. And theory is far from providing a clear answer as to how monetary policy should react in a highly uncertain environment.

The classic Brainard (1967) attenuation principle states that monetary policy should be conservative in the face of uncertainty about the impact of underlying shocks and/or the impact of any policy mis-calibration on inflation (Pill, 2022). The greater the uncertainty, the greater the probability that a more aggressive monetary policy response may move inflation and output away from target[25].

An alternative strand of literature, on the basis of robust control principles, provides guidance pointing in the opposite direction in order to keep longer-term expectations well-anchored[26]. The experience of the 1970s shows that shocks can be concatenated, especially when they originate on the supply side of the economy, with strong additive effects on economic variables. In this case, theory suggests that monetary policy should be more reactive to prevent backward-looking behaviour from becoming embedded in economic expectations.

These considerations could help to characterise the ECB's reaction during the last monetary policy cycle. In the initial phase when the inflation persistence of the adverse supply shocks that hit the euro area in 2021 and 2022 was unclear, policy instruments were adjusted gradually. But when it became clearer that inflation persistence was high, affecting the medium-term inflation outlook, and risks of an upside de-anchoring of inflation expectations emerged, the ECB opted for forceful and persistent rate increases[27] (for example holding at 4 percent the deposit facility rate from September 2023 to June 2024).

The reaction of monetary policy made sure that inflation did not remain too far

[24] A related issue is to what extent supply constraints could have made the Phillips curve shift to the left and become steeper, implying that demand shifts would generate more inflation volatility than in the past. In this case, aggressive contraction would generate a large output loss. Again, flexibility with the duration of the medium could help to avoid these effects.

[25] Again, it will depend on the degree of persistence of the shocks that hit the economy, as shown by Ferrero *et al* (2019).

[26] For empirical evidence showing that central banks' excessive caution may shift inflation expectations away from their inflation target, see Dupraz *et al* (2023).

[27] A pair of 75-basis-point hikes in September and October 2022, followed by three 50-basis-point hikes between December 2022 and March 2023.

above the target for too long, and therefore price and wage-setters could focus on recovering the backward purchasing power lost without worrying about the 'forward' adjustment dynamics that would be generated by any de-anchoring of inflation expectations. As such, an upward de-anchoring of inflation expectations was observed in 2022, which the ECB policy response helped to limit and then reduce (Lane, 2024b).

With respect to the first phase of the inflation surge, it has been argued that the forward guidance that was put in place in July 2021 unduly delayed the ECB response (Darvas and Martins, 2022; De Haan, 2025), stressing that, first, the 2021 interest rate forward guidance included a link with QE that retarded the interest rate liftoff, and second, it was linked to three conditions that, again, hampered a timelier reaction[28].

The available model simulations (Lane, 2024b) show that, had the nature and size of shocks been known back in the fourth quarter of 2021, the model-implied optimal policy[29] would have called for interest rates to be increased earlier and more forcefully. However, when constructed with the information available at the time (taking as a basis the ECB macroeconomic projections), the optimal policy path is similar to that followed by the ECB, with the exception of early 2022, when optimal policy would have called for interest rate hikes already in the first quarter[30]. Moreover, this evidence suggests that the timing of this tightening did not prove crucial, given the forceful and persistent response after the first hike (BIS, 2024; Lane, 2024b). All in all, forecast errors seem to explain to a great extent the delay with the first hike, with staff/Eurosystem ECB projections only showing inflation at or above 2 percent for the whole projection horizon in June 2022[31].

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[28] The exact wording of the linked forward guidance was *"The Governing Council expects net purchases to end shortly before it starts raising the key ECB interest rates"*. In addition, there was forward guidance on QE, for example in December 2021: *"the Governing Council decided on a monthly net purchase pace of €40 billion in the second quarter and €30 billion in the third quarter under the APP. From October 2022 onwards, the Governing Council will maintain net asset purchases under the APP at a monthly pace of €20 billion for as long as necessary to reinforce the accommodative impact of its policy rates"*. And there was forward guidance on interest rates, with three conditions for the liftoff: *"the Governing Council expects the key ECB interest rates to remain at their present or lower levels until it sees inflation reaching 2% well ahead of the end of its projection horizon and durably for the rest of the projection horizon, and it judges that realised progress in underlying inflation is sufficiently advanced to be consistent with inflation stabilising at 2% over the medium term"*. The three conditions were calibrated as a mechanism to hedge against false positives, ie short-lived inflationary shocks of the type observed in the first ten years of monetary union that could trigger a premature reaction (a premature liftoff). Moreover, the linked forward guidance should have been interpreted with a hierarchy between the two: the key conditions for policy were those attached to the rate policy while the horizon for QE was sized relative to the horizon of liftoff (indeed, in June 2018 the Governing Council rotated to rate guidance as the primary instrument to steer the monetary policy stance; see Praet, 2019, and Rostagno *et al*, 2019).

[29] Defined by the minimisation of loss function featuring squared terms for the deviation of inflation from target, the output gap and the change in the interest rate.

[30] A second episode was identified in September 2023 when the model-implied optimal policy would have called for one fewer interest-rate hike.

[31] See Lane (2024), which simulated a set of alternative policy paths, based on two macroeconomic models of the euro area. The results suggested that, if the ECB had perfect foresight on the path that inflation and output would follow subsequently, it should have started hiking in the fourth quarter of 2021, to between 4.5

A first conclusion from this discussion is that there is no single answer to how monetary policy should respond optimally to supply shocks. It depends on the magnitude, the external or internal origin and the expected persistence, among other factors.

Second, facing high uncertainty requires judgement based on a critical examination of the evidence and the realisation that patterns observed in the past can change rapidly. It also requires flexibility in relation to the speed, scale and persistence of policy adjustments, as different situations may necessitate different approaches. Thus, a basic response to risk and uncertainty is to proceed on a meeting-by-meeting and data (but not data point) dependent manner, as the ECB has done in recent years. In such a context, it is also useful to identify risk proxies to monitor and communicate (eg underlying inflation and indicators of the strength of monetary transmission in the case of the ECB).

Fourth, if gradualism in moving policy rates were an optimal option, keeping inflation expectations anchored might also require forceful action in certain circumstances. In this regard, the 2021 strategy review stressed that when the economy is close to the lower bound and is suffering a deflationary shock, especially forceful or persistent monetary policy measures might be required. The review also recognised that "it is important to respond forcefully to large, sustained deviations of inflation from the target in either direction" (emphasis added). The 2025 strategy review should emphasise more clearly the symmetry in the potential need for forceful action[32]. A combination of forcefulness and persistence is appropriate whenever there is a threat to the anchor, while naturally still taking into account the special properties of the effective lower bound.

Finally, facing high uncertainty should imply avoidance of unconditional commitments by the central banks. In particular, the rapid reversal of the macro context and the required policy response observed in recent years stresses the need to accompany forward guidance with conditionality elements. Thus, clear communication that certain forward guidance on rates or QE hinges on the prevalence of a certain inflationary outlook is of the essence. This could include providing well-defined, state-contingent thresholds. The criteria for this conditionality should be carefully considered and adjusted to provide greater flexibility if the economic environment does not evolve as expected. Unconditional forward guidance should therefore be avoided.

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percent and 6 percent by mid-2023, depending on the model used. Inflation would have peaked at around 7 percent, roughly 3½ percentage points below the actual inflation peak in October 2022. However, output would have needed to decline by 5 percent below the baseline by the end of 2022 using one of the models, and to contract by 2 percent in early 2022 and continue contracting for over a year using the second model.

[32] The potential need for forceful action at the lower bound was included in the review monetary policy statement and press release, while the potential need to act forceful in cases of sustained deviations of inflation from target in either direction was mentioned only in the overview of the monetary policy strategy (ECB, 2021a, 2021b, 2021c, respectively).

5. ON MONETARY POLICY INSTRUMENTS

What has been learned since 2021 about the effectiveness of policy instruments? In principle, several features could have altered the transmission mechanism of monetary policy in the euro area in the recent tightening process[33].

First, banks are better capitalised and have higher liquidity ratios and there has been an increase in concentration in the banking sector[34], which could have weakened the transmission mechanism[35].

A second factor, pointing in the same direction, relates to the debt burden of the euro-area non-financial private sector, which has become less sensitive to interest rates in the short term[36].

Third, when the ECB started to tighten its monetary policy, money market rates were in negative territory and there was an excess of liquidity in the banking system. This very accommodative starting position may have weakened the pass-through of market rates to deposit rates[37].

Fourth, there has been a shift from bank to bond funding over the last decade[38]. This, together with faster monetary policy pass-through to bond rates than to bank rates, implies more rapid transmission than in the past.

Fifth, some euro-area countries experienced significant increases in house prices during the decade running up to the pandemic. The monetary tightening may have contributed to an adjustment in house prices, especially in countries with stretched valuations, adding contractionary impact[39].

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[33] For further details, see Hernández de Cos (2024).

[34] For instance, the average share of assets held by the five largest banks in the euro area rose from 60 percent in 2008 to 68 percent at the end of 2022.

[35] Better capitalised banks are able to obtain funding at lower costs and to absorb potential losses associated with the tightening of monetary policy and, as a consequence, can grant more loans at lower prices (Altavilla *et al*, 2020; Holton and Rodriguez d'Acri, 2018; Gauvin, 2014). For the impact of concentration, see Mayordomo *et al* (2023) or Van Leuvensteijn *et al* (2013).

[36] Between 2012 and 2022, the share of households' bank debt with an interest rate fixation period of up to one year fell from 35 percent to 24 percent, while for non-financial firms the proportion of bank debt either maturing within a year or with an interest rate fixation period of up to one year declined from 70 percent to 59 percemt. However, the gross debt-to-income ratios of households were higher than in the 2000 and 2005 tightening episodes, which would tend to strengthen transmission. See Lane (2023).

[37] However, cutting rates to negative levels can compress term rates by more than an equally sized cut from one positive level to another. This is because of frictions that encourage investors to move along the duration and risk scale when interest rates are negative. Symmetrically, raising rates from negative to zero or positive levels could also have a disproportionate tightening impact on the term structure. Advance communication of an imminent hike can attenuate this threshold effect. See Altavilla *et al* (2021).

[38] Bond debt increased from 16 percent to 24 percent of non-financial corporations' total debt between 2012 and 2022.

[39] A potential decrease in house prices would weigh negatively on household wealth. Additionally, it would have a negative impact on banks' portfolios, by reducing the value of the collateral provided to banks by households and firms, which might ultimately affect credit developments.

Sixth, the tightening took place in the context of weak growth and high uncertainty, which may have contributed to amplifying its impact through higher risk premia and tighter credit standards.

Finally, the current tightening cycle has been unprecedented both in terms of its magnitude and speed[40]. The possible existence of non-linearities could have strengthened the transmission.

The available evidence shows a certain amplification of the tightening of financing conditions through higher risk premia and tighter credit standards than in the past. Consequently, the slowdown in credit flows has been more intense than predicted by historical patterns[41]. However, the strong growth in nominal income, in a context of robust employment and profit growth, has slowed the increase in credit risk, which still falls short of what would be expected based on historical experience.

In terms of the impact on activity and inflation, the ECB macroeconomic projections overestimated GDP growth, and the downward surprises do not seem to be fully explained by errors in the technical assumptions. In these projections, the impact of financial variables on activity and inflation is based largely on historical correlations and linear models, which might signal a stronger transmission than in the past.

Inflation projection errors were significant, as noted above, but their accuracy has significantly improved since the end of 2022. Complementary evidence, using micro data, shows that the pass-through of the current tightening has become faster and stronger than in the past (Allayioti et al, 2024).

Additional evidence based on recursive estimates confirms these results that the transmission may have been somewhat more intense than in the past[42]. This is especially the case for growth, whereas the evidence for inflation is less conclusive[43].

All in all, the available evidence confirms that monetary policy has played a crucial role in the disinflation process and validates the use of the instruments, in particular the role of interest rates as the primary tool. ECB analysis shows that without the sizeable tightening, inflation would have been about two percentage points higher on average in each year between 2023 and 2026 (Lane, 2024a). Importantly, these estimates do not incorporate the impact of monetary policy in keeping long-term inflation expectations anchored.

At the same time, given the scale of the monetary tightening, it can be argued that the 'sacrifice ratio' of bringing inflation down has been relatively low. The labour mar-

[40] Between July 2022 and September 2023 (ie over 14 months) policy rates rose by 450 basis points and were accompanied by a significant reduction in the balance sheet.

[41] For further details, see Lane (2023) and García-Posada *et al* (2024).

[42] The evidence is based on recursive estimates of the impact of (non-systematic) monetary policy shocks by means of a structural VAR model extension from Brandt *et al* (2021), identified through sign restrictions.

[43] See, for the US case, Romer *et al* (2024b) and Auclert *et al* (2023). Moreover, Canova *et al* (2024) showed how different types of monetary policy shocks impact the US economy under high- versus low-inflation regimes. They concluded that in high-inflation regimes, the peak response of output growth, unemployment and inflation is smaller, but the effects persist longer.

ket has demonstrated remarkable resilience[44], with unemployment rates lower than expected from staff projections[45]. There may be two reasons for this.

First, the severity of the output-inflation trade-off depends crucially on inflation expectations. In the New Keynesian Phillips curve, a rise in inflation expectations shifts the relationship between the short-term output gap and inflation upwards. This implies that stabilising output at potential is not enough to bring inflation back to target: instead, the central bank must depress output below potential to achieve the inflation target.

In the latest inflationary episode, there was a real risk that the sharp and persistent rise in inflation would lead to a de-anchoring of inflation expectations (BIS, 2022; Carstens, 2022). However, inflation expectations over medium- and long-term horizons remained broadly anchored to the 2 percent target. It can be argued that the credibility central banks have gained over the last decades allowed for such strong anchoring of inflation expectations[46]. This could be seen as one of the reasons why the sacrifice ratio has been relatively small compared to previous inflationary episodes during which supply shocks predominated, such as in the 1970s.

Second, the output-inflation trade-off also depends on the slope of this relationship, ie how much output must fall to bring inflation down (for given inflation expectations). In the basic New Keynesian model, this slope is steeper when the frequency with which firms adjust their prices to changes in their cost and demand conditions is greater.

During the recent episode of high inflation, firms changed their prices more frequently, accelerating the transmission of shocks to inflation[47]. This implies that inflation is more sensitive to changes in aggregate demand, allowing the central bank to achieve the same reduction in inflation with smaller output losses[48].

All in all, an additional conclusion should be the crucial importance for central banks of acting and communicating in a way that keeps inflation expectations well an-

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[44] The euro-area unemployment rate falling from 8.8 percent in September 2020 to 6.2 percent in February 2025.

[45] The persistent underestimation of employment growth could be attributed, at least to some extent, to labour hoarding by firms in a context of a very tight labour market and an economic slowdown largely perceived as transitory.

[46] See Villeroy de Galhau (2024b). Dupraz and Marx (2023) estimated that, had inflation expectations been as poorly anchored as they were in the 1970s in the US, ECB policy rates would have had to peak at about 8 percent instead of 4 percent. Central bank credibility allows for less imported inflation and hence moderate inflation expectations (Ciccarelli and Mojon, 2010).

[47] Cavallo *et al* (2023) showed how the frequency of price changes increases dramatically after a large shock.

[48] The optimal monetary policy prescription in this situation has been analysed in the literature, concluding that the central bank should 'strike while the iron is hot', in other words, fight inflation by countering firms' inflationary aspirations, thereby achieving a lower sacrifice ratio (see Karadi *et al*, 2024). More generally, when the Phillips curve is steep for an economy overall, the benefits of monetary tightening are amplified. At the same time, when supply constraints are limited to the commodity sector, conventional policy rules, such as those targeting measures of core inflation, are valid since targeting sticky prices results in more gradual disinflation with a smoother output path (see IMF, 2024).

chored. It also requires a better understanding of the role of different measures of inflation expectations at different horizons on the evolution of inflation dynamics.

5.1. THE EXPERIENCE WITH QUANTITATIVE TIGHTENING

The macro-financial effects of QE have been analysed extensively[49]. The theory shows that QE lowers yields mainly through anticipation effects: investors react depending on their expectations of how much debt the central bank will extract over time from the market, so that risk-averse market participants will not have to hold it. In part, this involves the extraction of duration risk – the risk related to changes in a bond's market price over its remaining life due to changes in short-term interest rates (Vayanos *et al*, 2021; Eser *et al*, 2023). In the euro area, duration-risk extraction is reinforced by the extraction of sovereign credit risk (Costain *et al*, 2024).

There are some reasons to expect that the effects of QT will not just be the mirror image of QE (Vayanos *et al*, 2021; Costain *et al*, 2024). First, QE policies were often implemented at times of great market stress, when their effects are larger (Krishnamurthy, 2022) , whereas central banks have waited for times of market tranquillity before embarking on QT. Furthermore, QE took the form of outright purchases, but QT has taken the form of a passive run-off of bond portfolios[50]. Lastly, the announcement of large-scale QE programmes often came as a surprise to the market, while the current QT path was carefully announced in advance[51].

Empirical studies find much smaller effects of QT than those attributed to QE[52]. It is reasonable to assume that the reduced response to QT reflects its gradual and predictable implementation[53], and also the more benign financial market conditions, compared to conditions when QE began. The recent experience therefore seems to validate the gradual and predictable approach to QT adopted by central banks.

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[49] See, for instance, Aguilar *et al* (2020, 2022, 2024), Altavilla *et al* (2021) and Eser *et al* (2023).

[50] Among the four major central banks (the Federal Reserve, ECB, Bank of England and Bank of Japan), only the Bank of England has implemented active QT by selling bonds in the current episode.

[51] For instance, the ECB announced in December 2022 the pace at which it would begin to reduce the Asset Purchase Programme portfolio through partial reinvestment of maturing bonds, ensuring a gradual and predictable reduction. See ECB press release of 15 December 2022, 'Monetary policy decisions', https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.mp221215~f3461d7b6e.en.html. Logan (2024) likewise discussed asymmetries in the observed effects of QE and QT attributable to differing financial conditions at the time of implementation, and to differences in the impacts of anticipated and unanticipated policy announcements.

[52] Du *et al* (2024) surveyed the effects of QT across countries. Their findings suggest that the cumulative impact of QT announcements from 2021 to 2023 was an increase of around 20-26 bps, on average across countries, government bond yields at horizons of one year and longer, with some variation between countries. Eser *et al* (2023) estimated a cumulative decline in yields of more than 90 bps in ten-year euro area yields in response to the ECB's Asset Purchase Programme over the years of its maximum impact (roughly 2017-2019). See also Box 3.1 in Banco de España (2023).

[53] Du *et al* (2024) found it challenging to identify any 'surprises' in QT actions.

At the same time, the experience of central banks that faced some bumps in the road to balance-sheet normalisation shows that temporary flexibility in its implementation can be useful in managing liquidity events without reversing the medium-term path of QT[54].

Looking forward, as excess liquidity in the system decreases alongside central banks' balance-sheet run offs, it will be important to monitor market developments and analyse which investor types are absorbing the increased supplies of bonds (Ferrara *et al*, 2024). Likewise, it will be essential to ensure that reserves remain ample at the endpoint of the QT process, as otherwise the impact of QT may be greater and the risk of liquidity events may increase (Copeland *et al*, 2021; Altavilla *et al*, 2023).

The experience with QT offers some lessons for QE as well. As concluded in the ECB's 2021 strategy review, QE is a useful tool when the interest rates are constrained at the effective lower bound. However, the most recent period has also made visible the potential costs derived from the interest rate risk assumed by central banks when entering into QE, with many central banks showing annual losses from asset holdings.

While monetary policy should be designed to maintain price stability and a central bank can continue performing its functions while incurring losses or even recognising negative equity (Esteban *et al*, 2024), it can be argued that not distributing profits or asking for further capital contributions could prompt external interference (Chiacchio *et al*, 2018; Reis, 2013). In this regard, one approach could be to establish predefined rules for automatic recapitalisation of the central bank if reserves fall below a certain threshold, which would head off potentially difficult political discussions during periods of persistent losses (Bank of Canada, 2025; Forbes *et al*, 2025).

6. MONETARY POLICY AND FINANCIAL STABILITY

Interactions between monetary policy and financial stability are potentially significant. On many occasions, the pursuit of price stability is complementary to the pursuit of financial stability – for instance, if financial stability and inflationary risks were to emerge in parallel. In stressed conditions in which a deflationary demand shock is present, financial-stability risks might also materialise in a manner that does not create a trade-off with monetary policy. The COVID-19 pandemic was a case in point.

But even if liquidity crises occur during high-inflation periods, tools can be skilfully designed to ensure separation (Schnabel, 2023). The tools must be targeted and temporary, and the underlying financial-stability challenge must truly be one of liquidity rather than solvency. For instance, the intervention by the Bank of England in autumn 2022 to stabilise the gilt market can be regarded as one instance in which monetary policy had to be applied to directly address a financial-stability problem.

[54] For example, the Bank of England faced a liquidity crisis affecting UK pension funds at the outset of its QT policy, briefly expanding its longer bond purchases but maintaining its medium-term path of balance-sheet normalisation (Pinter, 2023).

The ECB's July 2022 announcement of the transmission protection mechanism (TPI) was another example. It occurred in an environment of mounting inflationary pressures and of a monetary policy tightening stance. Heightened concerns about sovereign debt dynamics led to sharp increases in sovereign bond yields that could have triggered severe financial distress and market fragmentation. The TPI helped stabilise markets and therefore support the smooth functioning of financial markets necessary to transmit the monetary policy stance evenly across countries. In this regard, the TPI has been crucial in enabling a forceful monetary policy response to tackle the inflation problem.

There are cases, however, in which a trade-off between the two objectives arises, such as when bank solvency issues emerge in a high inflation environment. These solvency issues should be mitigated by a proper supervision and resolution framework and by actions taken by fiscal authorities. Nonetheless, monetary policy may have to react, considering that a financial crisis is likely to lead to the emergence of prolonged disinflationary forces that should ease this trade-off.

Another instance in which such a trade-off may emerge is when a build-up of systemic risk occurs in a situation of subdued inflation. A prolonged loosening of monetary policy could exacerbate financial stability risks, and the activation of macroprudential policy tools may not be enough. The prolonged low-interest rate environment prevalent before the pandemic is often cited as an example. In such a context, monetary policy could be designed to minimise the potential negative impact on financial stability. For example, the ECB's TLTROs, which set a lending target that excludes housing loans, were designed specifically to not contribute to the formation of real-estate bubbles.

All in all, the latest developments confirm the conclusion reached in the 2021 strategy review of the need to take financial stability into account in monetary policy deliberations[55].

In addition, the recent experience shows that it could be useful to more clearly distinguish between QE for market functioning (financial stability) versus monetary stimulus (stance), and from the need to maintain a structural bond portfolio providing liquidity to the banking system. While differentiating between the price and financial-stability objectives is inherently complex, and sometimes (like the pandemic emergency purchase programme (PEPP) in the ECB's case) it can make sense to have a dual role, a clearer distinction would not only improve communication around these programmes, but would also incentivise a careful consideration of their amount, duration and structure, to ensure they are designed to accomplish their specific goals (Bank of Canada, 2025; Forbes *et al*, 2025).

[55] In practical terms, this means that an integrated framework of economic analysis and monetary and financial analysis is used to measure developments in financial vulnerabilities and macroprudential measures, and their impact on output and inflation, including in the long run. It does not mean that monetary policy consists of systematic policies of 'leaning into the wind' (whereby monetary policy is systematically tightened when systemic risk builds up) or of 'cleaning' (whereby monetary policy is systematically loosened when systemic risk materialises). It is rather a flexible approach.

There are also lessons for macroprudential policy (Hernández de Cos, 2023a). A more active stance is needed to foster the accumulation of releasable macroprudential buffers during non-crisis periods in order to release them in crisis periods. Finally, the effective transmission of both monetary and macroprudential policies can be significantly enhanced by deepening integration within the EU banking union and through the creation of a Capital Markets Union.

7. MONETARY AND FISCAL POLICY INTERACTIONS

The interactions between monetary and fiscal policy are also strong. The coordinated fiscal and monetary policy response during the pandemic was crucial to minimise the potential structural damage caused by the crisis, while avoiding deflationary pressures. However, as the inflationary shocks took hold, monetary and fiscal policies increasingly pulled in opposite directions. Fiscal policy responded with measures to mitigate the impact of the price shock on households and businesses. However, many of these measures were not sufficiently targeted, resulting in an expansionary impulse that was broader than necessary (Ferdinandusse *et al*, 2024).

The monetary policy tightening generated a significant increase in sovereign bond yields in all countries. However, it did not trigger a significant increase in sovereign bond spreads between countries. Several factors could explain this outcome, including higher growth in some of the more highly indebted countries, the high average sovereign-bond maturity, the strengthening of the European framework since the global financial crisis and the extraordinary European response during the pandemic, that benefited countries with higher debt levels more – all this in a context of high risk appetite on the part of investors in global financial markets.

The predictable and gradual reduction of the balance sheet and the TPI announcement also played significant roles. The rationale behind the TPI lies in the fact that the combination of national fiscal policies and single monetary policy can, in certain circumstances, generate abrupt interest-rate spirals in bond markets. These developments could affect the capacity of the ECB to guarantee an adequate monetary policy stance. By announcing possible interventions or, if necessary, by carrying out targeted, temporary interventions, the central bank can prevent these spirals, and therefore it can ensure the smooth transmission of monetary policy across the whole euro area.

To ensure that market discipline for sound fiscal policies is preserved, the TPI sets clear conditions for the purchase of bonds: i) the ECB cannot counter tensions that arise because of country fundamentals[56]; ii) it can only be used in countries that pursue sound and sustainable macroeconomic policies, including compliance with EU fiscal rules.

In this respect, the EU fiscal framework, updated in 2024, focuses mainly on debt sustainability, which could make it less likely that fiscal policy does conflicts with mon-

[56] Darvas *et al* (2024) found no evidence of fiscal dominance over euro-area monetary policy.

etary policy. It could also help to generate the fiscal buffers needed for fiscal policy to play its stabilising role in complementing monetary policy. And it could encourage structural reforms that have the capacity to increase potential output growth and r*, giving monetary policy more room for manoeuvre (Draghi, 2015). Of course, all this will require the effective implementation of the updated framework by EU countries.

In practical terms, given the elevated public debt levels and low potential growth rates in many countries, and the fact that real interest rates remain higher than before the pandemic, guaranteeing fiscal sustainability should imply a restrictive fiscal policy in the next few years, in particular in countries with significant fiscal imbalances. In parallel, the fiscal adjustments will take place at a time when public investment needs in relation to climate change, digitalisation and defence are significant (Draghi, 2024) and will be very difficult to achieve with the fiscal space available in many countries (Boivin *et al*, 2025)[57]. This should be another strong argument, in addition to the most traditional ones, in favour of a common, permanent, European financing instrument.

8. CONCLUSIONS

Since mid-2021, the euro-area economy has gone through several shocks, leading to a period of the highest inflation seen since the creation of the European Monetary Union, and followed by the largest and swiftest increase in interest rates. Even in mid-2025, although inflation has declined significantly since its peak, it remains above 2 percent, and interest rates are significantly higher than those prevailing in 2021 and before the pandemic.

Forceful and persistent measures taken by the ECB have succeeded in bringing inflation down and delivering on the bank's price-stability mandate. All this has been done within the monetary policy framework approved in 2021, before the inflationary episode. A first conclusion that could be drawn is therefore that there is no need for a drastic change in the framework in the context of the ECB's 2025 review.

This general assessment should be compatible with identifying some areas for potential fine-tuning of the framework. In particular, the 2021 review was very much focused on the effective lower bound. The recent inflationary episode and the high level of uncertainty justify more general communication of future strategy reviews, emphasising robustness to very different scenarios.

A good example of this change in communication relates to the central bank's monetary policy response. The 2021 review emphasised the need for forceful action when the economy is close to the lower bound and suffering from a deflationary shock. While of course still taking into account the special properties of the effective lower bound, the 2025 review should emphasise more clearly that a combination of forcefulness and persistence is appropriate whenever there is a threat to the inflation anchor.

[57] The European Commission's March 2025 proposal to activate the national escape clause under the fiscal rules for defence investments illustrates the difficulty.

The high level of uncertainty, which is likely to continue over the next few years, will also require an emphasis on flexibility to adapt to the magnitude, origin and persistence of shocks. It should also imply avoiding the use of unconditional forward guidance.

There is also a need to communicate better on the level of uncertainty and its consequences for monetary policymaking. A promising approach would be to make greater use of alternative scenarios and sensitivity analyses. These scenarios should also receive more attention in ECB communications.

The large forecast errors observed since 2021 imply that forecasting tools should be improved, in particular when dealing with large supply shocks, especially because there are good reasons to believe that these will become more frequent. A deeper analysis of global/external and sectoral shocks and how this can be incorporated into forecasting tools should also be a priority. A better understanding of the role of different measure of inflation expectations at different horizons on the evolution of inflation dynamics should also be a priority.

Moreover, the 2021 ECB monetary policy strategy to explicitly take financial-stability considerations into account in monetary policy deliberations seems valid. However, when possible, it might be necessary to more clearly distinguish between QE for market functioning versus monetary stimulus, which could incentivise a careful assessment of the amount, duration and structure of any asset purchase programme.

On fiscal policy, the 2021 review emphasised the effectiveness of expansionary fiscal policy to help deal with negative shocks to growth and inflation in the context of the effective lower bound. Given the high level of public debt in many countries, the new review should focus on the need for sustainable fiscal policies as a precondition for a well- functioning EMU.

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4. THE IMPLEMENTATION OF THE REVAMPED EUROPEAN FISCAL RULES: ANOTHER MISSED OPPORTUNITY FOR ADDRESSING THE DEBT PROBLEM?

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ABSTRACT

Fiscal policy in Europe faces extraordinary challenges. The need to reduce high public debt and restore fiscal buffers to ensure effective macroeconomic stabilisation is increasingly constrained by mounting pressures linked to ageing populations, climate and digital transitions, and growing demands for security, defence, and competitiveness. In this context, well-designed national fiscal frameworks and the recent reform of EU fiscal rules are essential to support medium-term planning and safeguard debt sustainability. While the new framework represents a conceptual improvement—introducing greater flexibility, country specificity, country ownership and a debt-based anchor—its effectiveness will depend on implementation. Weak enforcement mechanisms, limited involvement of national parliaments and independent institutions, and the absence of a genuine common fiscal capacity to finance common public goods may ultimately constrain its ability to deliver lasting results in terms of improving debt sustainability.

1. INTRODUCTION

The fiscal architecture of the European Union has undergone a profound transformation with the adoption of a new economic governance framework in April 2024. This reform comes at a critical juncture. Following successive crises —the global financial crisis, the sovereign debt crisis, the COVID-19 pandemic, and the war in Ukraine— European fiscal policy finds itself under renewed pressure. On one hand, high levels of public debt and the erosion of fiscal space call for credible consolidation strategies. On the other hand, Europe faces unprecedented investment needs arising from structural megatrends such as demographic ageing, climate change, digital transformation, and geopolitical instability, including the need to boost defence spending and industrial competitiveness.

In this demanding environment, striking a balance between fiscal sustainability and economic resilience is more important than ever. The reform of the EU fiscal rules aims to provide a more realistic, transparent, and country-specific framework to guide fiscal policy over the medium term. By shifting the focus from annual deficit targets to multi-year expenditure paths anchored in debt sustainability analysis (DSA), the new rules seek to reconcile fiscal discipline with flexibility and national ownership.

However, while the reform addresses some of the key shortcomings of the previous framework —including excessive complexity and weak compliance— important challenges remain. Questions of implementation, transparency, and coordination across levels of government persist. In particular, the absence of a common fiscal capacity at the EU level and the limited role assigned to Independent Fiscal Institutions (IFIs) risk undermining the credibility and consistency of the new rules. This paper assesses the scope and limitations of the new fiscal framework and reflects on the institutional and political conditions necessary to ensure its effectiveness.

2. INNOVATIONS IN THE NEW FISCAL FRAMEWORK

In February 2024, the institutions and governments of the European Union reached an agreement on the reform of the fiscal governance framework, which is structured around the Stability and Growth Pact (SGP). The new framework introduces significant changes in the approach to fiscal surveillance at the European level. However, before outlining the main features and challenges of the new framework, It is useful to briefly analyse the sources of past errors and to review the root causes of the complexity that came to define the previous system, in order to avoid the risk of repeating the same shortcomings under the new governance model (Carnot, Deroose, Mourre and Pench (2018)).

When Romano Prodi described the Stability and Growth Pact (SGP) in 2002 as “stupid” and “rigid,” he could scarcely have anticipated that, in time, the fiscal rules would evolve to become so “intelligent” and “flexible” that their complexity would ultimately render them virtually unenforceable. Over the years, successive reforms and reinterpretations of the European Union’s fiscal governance framework have accumulated, resulting in a structure that was excessively complex and increasingly unpredictable.

The previous fiscal architecture was built on the premise of a “complete contract,” a highly ambitious approach that sought to reflect and anticipate all economic contingencies and adjust the Stability and Growth Pact (SGP) accordingly. Some of the reforms adopted —such as the Six-Pack, the Two-Pack, and the Fiscal Compact—were designed as responses to crises, while others were ad hoc changes introduced to address specific situations, such as the low growth, low inflation environment that prevailed in many EU countries in the years after the financial and sovereign crises. Over time, interpretative adjustments introduced short-term flexibility in the form of deviations from fiscal targets to accommodate public investment and structural reforms (European Commission, 2015)

The belief that every possible detail and special circumstance could be codified led to an accumulation of overlapping rules—on headline balances, structural balances, public expenditure, and debt—each associated with its own compliance indicators.

Implementation procedures, including both ex ante and ex post evaluations, were equally intricate. A key source of this complexity was the central role assigned to non-observable indicators, particularly the structural balance. Though theoretically appealing as a tool for promoting countercyclical policy, its estimation has been shown by numerous authors to be highly error-prone. This significantly increased the unpredictability of the framework and made it easier to justify non-compliance with fiscal, as policy decisions were based on provisional figures subject to considerable revision. As will be seen later, the goal of reducing reliance on non-observable variables has not been fully achieved.

While the system was initially intended to rest on transparent fiscal rules and multilateral pressure through the European Council, in practice, the growing number of exceptions allowed for bilateral negotiations between Member States and the European Commission. This trend progressively weakened fiscal requirements (Beetsma et al., 2018). For example, Zettelmeyer (2022) criticizes these bilateral arrangements as an unacceptable way to balance fiscal consolidation, macroeconomic stabilization, and investment priorities.

In addition to the growing body of EU-level rules, efforts were made to reinforce fiscal discipline by introducing national fiscal rules, ideally enshrined in national laws or constitutions. In particular, the Fiscal Compact decentralized discipline by requiring Member States to adopt national balanced budget rules, limiting the cyclically adjusted deficit to no more than 0.5% of GDP (Medium Term Objective (MTO)). Over time, the evolution of the EU rules was not mirrored by parallel developments in national frameworks. This mismatch generated new inconsistencies and sources of complexity. In some cases, Member States took advantage of the misalignment between national and EU rules, engaging in regulatory arbitrage between both, further complicating enforcement and undermining the credibility of the entire system.

Dissatisfaction with the former governance model was widespread, and the need for reform broadly recognized (Darvas, Martin and Ragot (2018)). A common critique emphasized the intricate nature of the framework and its failure to secure consistent compliance from member states. In 2020, the European Commission itself acknowledged that “the fiscal rules have become less transparent, hampering predictability, communication, and political buy-in” (European Commission, 2020).

More critically, the former framework failed to foster the sound design of fiscal policy in several key areas. Specifically, it has not ensured the sustainability of public finances; it has not enabled the adoption of countercyclical fiscal strategies; and it has certainly not facilitated the effective coordination of fiscal policies across the Economic and Monetary Union (EMU) as a whole.

THE ADVANTAGES OF THE NEW FRAMEWORK

The shortcomings outlined above underscored the need for a comprehensive and coherent reform process to enhance both the functionality and legitimacy of the EU's fiscal governance framework.

Conceptually, the reform has been shaped by a shared recognition among European economies of a prevailing macroeconomic environment that differs significantly from the one in place when the original Pact was conceived. This new context is marked by lower growth prospects, a greater frequency of economic shocks, and substantial public spending and investment needs to address both a complex geopolitical landscape and structural competitiveness gaps—challenges highlighted in the Draghi (2024) and Letta (2024) reports- compounded by broader megatrends already identified in previous analyses, including climate change, population ageing, and digitalisation. In this sense, the EU's new economic governance framework builds on the premise that fiscal sustainability, reforms and investments are mutually reinforcing and should be fostered as part of an integrated approach.

The reform has also been shaped by a shift in the prevailing paradigm concerning the role and effectiveness of fiscal policy that has taken place during recent years of economic turbulence (Alberola, 2024). The original fiscal rules were conceived with a predominantly prohibitive logic: aimed at preventing fiscal policies that could result in "excessive" deficits or debt, to avoid negative spillovers in a monetary union. By contrast, the revised framework reflects a growing consensus around the enhanced effectiveness of fiscal policy—not only as a tool for macroeconomic stabilization but also as a means to address structural spending needs. Consequently, the new approach seeks to reconcile fiscal consolidation with growth-oriented strategies, promoting reforms and investment through a more gradual, credible, and country-tailored path of fiscal adjustment.

In terms of design, the reform seeks to address several weaknesses of the previous framework, including excessive complexity, the reliance on unobservable indicators for fiscal surveillance, weak enforcement mechanisms, and insufficient national ownership.

A particularly welcome development is the effort to move away from the short-termism associated with annual deficit targets, which often induce a procyclical fiscal stance. Instead, the new framework shifts the focus towards medium- and long-term public debt sustainability. Placing sustainability at the core of the framework in a more transparent and straightforward manner represents a significant step forward, in line with proposals by authors such as Blanchard et al. (2021).

In particular, the new framework is anchored in a country-specific assessment of debt sustainability risks. This risk-based surveillance approach relies on the Debt Sustainability Analysis (DSA) of the European Commission to determine the fiscal adjustment paths needed to ensure that public debt is placed on a plausibly declining trajectory by the end of the adjustment period (set at four years by default, extendable up to seven years under specific conditions). In addition, the budget deficit must be brought below the 3 percent of GDP threshold —if currently exceeded— and subsequently maintained below that level. The framework also includes compliance with a series of safeguards for minimum required reductions in deficits and debt levels, largely introduced at the insistence of Germany.

This risk-based surveillance approach implies more differentiated fiscal adjustment requirements across countries. In contrast to the rigid and uniform targets of the previous framework, the reformed approach aims to introduce greater gradualism and feasibility (Darvas et al (2024)). These commitments are not determined solely by initial conditions —i.e. past fiscal trajectories— but also by forward-looking pressures, particularly those associated with population ageing, which currently represent the most reliably quantifiable source of long-term fiscal stress. However, the spirit of the reform also includes provisions encouraging countries to progressively deepen their analysis of additional long-term risks to public finances, most notably those arising from climate change.

Adjustment commitments are now expressed through a single operational variable: net primary expenditure (defined as primary spending net of discretionary revenue measures, cyclical unemployment-related costs, expenditure fully financed by EU funds, and national co-financing of programmes funded by the EU). The logic aligns with key contributions in the literature (e.g., Darvas, Martin, and Ragot, 2018), which broadly advocate replacing the existing multitude of complex rules with, in principle, a simpler one: nominal spending should not grow faster than long-term nominal GDP to ensure debt sustainability and should grow more slowly in countries with excessive levels of debt.

This shift is expected to yield several benefits in terms of simplicity, transparency, and enforceability. Unlike the structural balance —previously the core indicator of the framework— net primary expenditure is more predictable, observable, and directly manageable by national authorities. It is also less prone to large ex post revisions, making it a more reliable anchor for fiscal surveillance. The use of limits on net primary expenditure helps create fiscal space during economic upturns or in the presence of windfall revenues —such as those linked to the real estate boom prior to the global financial crisis. At the same time, the exclusion of cyclical unemployment-related spending ensures room for the operation of automatic stabilisers. The simplicity of the measure also facilitates communication with the public, increasing the reputational cost of non-compliance. Eliminating reliance on structural measures may further encourage national administrations to internalise the rules, thereby enhancing compliance.

Another important innovation is the introduction of “memory” into the system. A control account will track cumulative deviations from the agreed expenditure paths. If these deviations exceed specified numerical thresholds, they may trigger a debt-based Excessive Deficit Procedure (EDP), under the corrective arm of the Stability and Growth Pact.

The new framework introduces the option to extend the fiscal adjustment period from four to seven years, in exchange for credible commitments to implement structural reforms and public investment. This element provides room for fiscal manoeuvre and introduces a pragmatic balance between consolidation and growth, allowing for more tailored and sustainable fiscal strategies.

Furthermore, the reformed framework incorporates two escape clauses—one at the EU level and another at the national level— to ensure that fiscal policy can play a stabilising role in the face of exceptional circumstances. The general escape clause allows for temporary deviations from the targets set, in response to a severe economic downturn affecting the EU as a whole. The national escape clause, on the other hand, permits country-specific deviations in the event of extraordinary circumstances beyond the government's control. Academic literature has long emphasised that credible, viable, and durable fiscal rules must include mechanisms that allow flexibility in response to shocks and events beyond the control of national governments. Replacing the previous complex system of waivers and ad hoc flexibility arrangements with more clearly defined escape clauses could enhance both the transparency and the predictability of the framework.

Finally, the reform aims to improve compliance with the fiscal framework by strengthening each country's commitment to its own adjustment path—what is commonly referred to as national ownership—and by developing credible mechanisms for the effective enforcement of the rules.

3. FROM THEORY TO PRACTICE: IMPLEMENTATION CHALLENGES

3.1. IMPLEMENTATION CHALLENGES EMERGING FROM THE LACK OF AMBITION OF THE REFORM AGAINST A BACKGROUND OF MASSIVE INVESTMENT NEEDS.

The new EU economic governance framework, while analytically sound, faces significant implementation challenges. At the forefront of these challenges is the lack of ambition in its design, which risks exposing the framework to an existential test even before it becomes fully operational.

Recent experience shows that the need for European fiscal coordination cannot be justified solely by the risk of negative spillovers from undisciplined national fiscal policies. This rationale led in the past to strict limitations on discretionary action by Member States and to hard-to-enforce clauses such as the "no bail-out" rule. Today, a broader vision is required —one that values the European project itself and aims to strengthen its legitimacy through better outcomes in growth and prosperity.

Public investment needs are raising immense and fundamental questions about the efficiency and legitimacy of the current allocation of spending responsibilities between the EU and its Member States. Based on estimates from the European Commission and NATO, Dorrucci et al. (2024) calculate a public funding gap for the green transformation, the digitalisation of the economy and the strengthening of its military defence amounting to €900 billion across the EU for the 2025–2031 period —representing roughly 0.6 to 1 percentage point of GDP annually. This is consistent with projections in the Draghi Report (2024). Although the revised fiscal framework improves the capacity to address such needs, particularly through extended adjustment periods, the scale of the challenge far exceeds the current flexibility.

The discussion is no longer limited to the need for a fiscal capacity to stabilise asymmetric shocks. The EU's response to the COVID-19 pandemic, the war in Ukraine and the new geopolitical context have contribute to reopen the debate on how European public goods are defined, funded, and distributed (Bakker et al, 2024). The development of "own resources" at the EU level could play a critical role in achieving strategic autonomy in areas like industrial policy, defence, and technological competitiveness.

The first significant test arose when the United States announced its intention to scale back its defence commitments in Europe, prompting the need to activate the national escape clause to allow for increased defence spending at the national level. The EU has launched a process aimed at enhancing its strategic autonomy in defence by 2030. The European Commission's REARM plan proposes €800 billion in investment, with €650 billion expected from national budgets. To accommodate this without significantly affecting other government spending plans, the Commission proposed a partial suspension of fiscal rules via the country-specific escape clause introduced in the new framework, which allows deviations from medium-term fiscal plans in exceptional circumstances. Specifically, under the Commission's proposal countries would be able to exceed their approved net expenditure paths by up to 1.5 percentage points of GDP annually during the period 2025–2028 for defence-and security related spending, provided they formally request activation of the clause. This additional fiscal space is calculated based on 2021 defence expenditure levels irrespective of any subsequent increases between 2021 and 2024, which are considered as part of the baseline current expenditure. For reporting purposes, defence expenditure is classified under COFOG (Classification of the Functions of Government). Sixteen Member States have expressed intent to use this mechanism, and twelve have submitted formal requests by the (flexible) deadline of April 30. Spain has yet to decide.

While the need to strengthen strategic autonomy in defence is not in question, some authors argue that the partial activation of the escape clause —limited exclusively to defence spending— represents an interpretation of the rules that closely resembles the discretionary and ad hoc approaches of the past which, in turn, could undermine its credibility. Rather than subjecting the new framework to such reinterpretations, it would have been more desirable to establish a common fiscal capacity at the European level. Overcoming the resistance by some Member states to pool certain resources could generate significant synergies. True, this would involve a strategic reassessment of spending priorities, notably in politically sensitive areas such as defence, which is beyond the scope of this paper. However, without such strategic reassessment, more critical consequences may arise from the fiscal side, as the new framework risks perpetuating a cycle of debt accumulation without sufficient consideration of long-term fiscal constraints.

The creation of the euro remains an incomplete project —a fair-weather currency unprepared to withstand the sequence of crises that we are now experiencing: the global financial and sovereign crises, the pandemic, the war in Ukraine, and the erosion of the United States as a reliable geopolitical partner. The contrast between Europe's fragmented response to the global financial crisis and its more coordinated actions following the pandemic and the war in Ukraine is significant—but insufficient. The opportunity to link the recent reform of fiscal rules to the introduction of a common fiscal capacity was quickly abandoned. Yet, today it is clear that creating fiscal space at the EU level is essential to finance European public goods—ranging from defence and energy security to climate action and technological competitiveness.

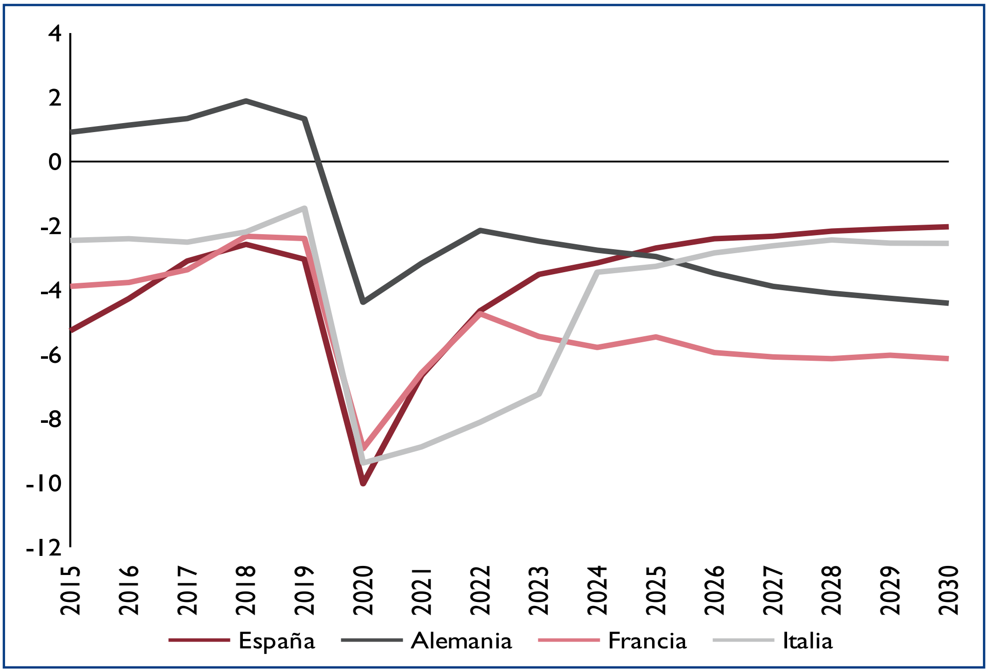
Public spending pressures in certain Member States, combined with political difficulties to adop significant offsetting measures, could represent another critical test for the functioning of the European fiscal framework. In particular, the fiscal situation and prospects for France and Germany raise concerns that history may repeat itself. The situation recalls the political crisis of 2005, when the Stability and Growth Pact was reformed after France and Germany breached the 3% deficit limit, exposing how political considerations could override rules-based discipline.

Nowadays, Germany —traditionally a champion of fiscal orthodoxy— has taken the historic step of reforming its constitutional "debt brake" to exempt defence spending from borrowing limits, marking a significant departure from its previous fiscal stance. The new defence golden rule excludes defence and security expenditures above 1% of GDP from the 0.35% structural deficit ceiling and establishes a €500 billion off-budget fund for infrastructure investment during a 12-year period. According to the coalition agreement, the federal government plans to invest €150 billion of this fund by 2029 —equivalent to approximately 0.9% of GDP annually. In addition, the reform allows German states (Länder) to run structural deficits of up to 0.35% of GDP— whereas they were previously required to maintain balanced budgets —thus expanding borrowing capacity also at the subnational level. Germany was among the first Member States to request activation of the national escape clause for defence spending, even if doing so results in an increase in public debt.

Although this shift does not pose immediate risks to Germany's fiscal sustainability, it raises serious concerns regarding fiscal coordination at the EU level. As Zettelmeyer (2025) argues, full utilisation of the additional borrowing space created by Germany's reformed debt brake would fundamentally conflict with EU fiscal rules, as it could result in public debt increasing from 63% of GDP in 2024 to around 100% by the late 2030s. Such a trajectory would clearly undermine the requirement to ensure a sustained and plausible decline in the debt ratio. Moreover, this shift raises doubts about Germany's future willingness to finance common European public goods.

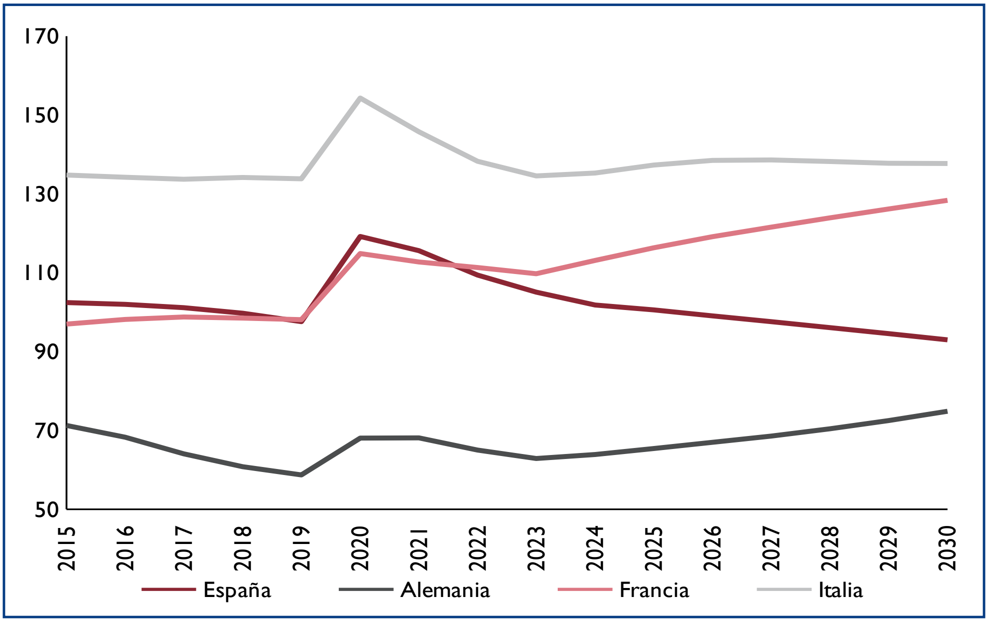
France also presents significant fiscal risks and thus, also threatens the intended functioning of the fiscal framework. Independent and international institutions, including the IMF, have raised serious doubts about the credibility of its objective to reduce the deficit below 3% of GDP by 2027. According to the IMF's projections, the deficit will remain at 5.3% in 2024 and decline only marginally to 4.5% by 2027 —well above the official target of 2.9% (see chart 1). This discrepancy stems from fiscal adjustment measures that are either not yet specified or face substantial political resistance. Public debt stood at 112% of GDP in 2024 and is projected to rise to 120% by 2027 in the absence of corrective action. The Cour des Comptes has warned that the current deficit-reduction path is unrealistic, especially in light of fiscal pressures related to climate change and the energy transition that are not adequately accounted for in current projections.

BUDGET BALANCE (% OF GDP)



Fuente: AMECO.

PUBLIC DEBT (% OF GDP)



Fuente: AMECO.

This situation is fuelling renewed calls for yet another reform of the EU fiscal rules—not solely to accommodate Germany, but to benefit all Member States currently facing constraints on public investment (Boivin and Darvas, 2025). Among the proposals under discussion are the exclusion of EU-approved infrastructure spending from the initial application of fiscal rules, and a revision of the Treaty's debt reference value from 60% to 90% of GDP. Some also advocate for the elimination of the *deficit resilience safeguard* —a provision paradoxically introduced at Germany's insistence during the 2024 reform— which requires a minimum annual reduction of 0.25 percentage points in the structural primary deficit when the debt-to-GDP ratio exceeds 60% and the structural primary deficit is greater than 1.5% of GDP.

The history of the SGP shows that fiscal rules are too often reformed as a reaction to external shocks, to increase flexibility. With massive investment needs, unless the European Union establishes a common fiscal capacity —equipped with the ability to issue joint debt—, the fiscal framework could face the same cycle of patchwork fixes and erosion of credibility and effectiveness.

3.2. MEDIUM-TERM PLANS (MTPS): STRENGTHS, GAPS, AND EXECUTION RISKS

Beyond these existential challenges, the reform completed in April 2024 left several key aspects of implementation unaddressed or at least open to very different potential outcomes.

A key innovation of the new framework is the requirement to submit national medium term fiscal structural plans (MTPs or Plans) covering four or five years depending on the length of the national electoral cycle. In these plans, each EU Member State commits to a multi-year public net expenditure path and explains how it will deliver investments and reforms that respond to the main challenges identified in the context of the European Semester. The plans must be submitted for endorsement to the European Commission and, ultimately, to the Council of the EU.

The submission and endorsement of the first set of national medium-term fiscal-structural plans (MTPs) was the first milestone in the implementation of the reformed economic governance framework. In October 2024 most EU Member States prepared the first set of Plans under the reformed economic governance framework. Germany, Lithuania and Austria have not yet submitted their plans at time of writing, with the delay attributed to elections and the subsequent formation of new governments in these countries, thus hindering the preparation process. Spain has submitted its Plan, but its Parliament has not been able to pass the draft budget for 2025. The ECOFIN Council endorsed the MTPs of most Member States on 21 January 2025 on the basis that the fiscal paths in the plans are credible and increased public investment is foreseen even amid fiscal consolidation.

However, according to EU Independent Fiscal Institutions (IFIs, 2025), most MTPs submitted by Member States include the mandatory information requested by the European Commission, but the completeness of the data is often insufficient to assess the realism of the proposed multiannual fiscal trajectories. In many cases, governments have failed to provide macroeconomic forecasts beyond 2025 or 2026, as well as on key assumptions regarding the composition of growth, essential to project public spending needs. In this respect, the macroeconomic scenario presented in some MTPs constitutes a step backwards compared to previous instruments such as Stability Programmes or public finance programming laws.

The details concerning the reforms and investments that Member States are expected to implement in order to qualify for an extension of the adjustment period from four to seven years are also insufficient. Most of the reforms are so far only public commitments – important parameters concerning the design and implementation of the reforms are still to be decided. Therefore, the overall impact on potential output growth is hard to quantify.

Even more concerning is the lack of information on public finances: several plans do not include forward-looking revenue projections or estimates of discretionary revenue measures, making it impossible to evaluate the plausibility of fiscal paths beyond 2024.

All of these projections are essential components of any credible medium-term fiscal strategy. In a context marked by intense and growing expenditure pressures, the public deserves to be informed about the strategy their governments intend to pursue in order to address these challenges. Transparency and completeness in fiscal planning are not only technical requirements, but also democratic imperatives.

An area that warrants particular attention in the Plans is the projected behaviour of public investment, as one of the central goals of the revised fiscal framework is to incentivise this spending. Experience suggest that public investment is often the first casualty of budgetary adjustment, although there is limited empirical evidence that EU fiscal rules systematically lead to cuts in public investment (Delgado et al., 2020); Indeed, recent research points to the so-called *social dominance hypothesis:* regardless of fiscal constraints, policymakers tend to prioritise current expenditure over investment (Larch and von Varder Wielen, 2024). In this context, the overall increase in public investment ratios across the EU remains modest —below 0.2% of GDP— based on national plans. According to the MTPs, more than one-third of EU Member States plan to reduce nationally financed public investment over the next four years. This is yet another indication that more innovative mechanisms, such as the creation of a new EU-level fund, could be essential to unlock the required scale of investment.

3.3. INSTITUTIONAL GAPS AND OWNERSHIP DEFICITS IN THE PREPARATION OF MTPS

A guiding principle of the reform was the reinforcement of national ownership —that is, the alignment of national institutions and procedures with the revised EU fiscal framework. In this context, strong political commitment from the central government is a necessary condition for the effectiveness of fiscal adjustment paths. However, political commitment alone does not constitute genuine national ownership. The latter requires the active involvement of a broader set of national institutions and stakeholders, including national parliaments, independent fiscal institutions (IFIs), and subnational governments. This is particularly crucial in decentralised countries, where broad consensus across institutional levels enhances both the legitimacy and the viability of the agreed fiscal path.

Although strengthening national ownership was a key objective of the governance reform, the changes introduced in the institutional architecture of the Economic Governance framework remain limited —particularly with respect to the role and capacity of national IFIs. Moreover, most Member States have failed to engage national stakeholders, including parliaments and IFIs, in the preparation of their Medium-Term Fiscal-Structural Plans. This omission risks undermining both the quality of the plans and the credibility of their implementation.

In particular, engagement with national parliaments was limited and largely confined to informal exchanges rather than being part of the formal approval processes. Only nine Member States officially submitted their Plans to their national parliament, and just three of them obtained formal parliamentary approval prior to submission to the European Commission. Furthermore, only ten Member States involved civil society and social partners in the consultation process, and in most of these cases, the consultations took place only after the government had already approved the plan (EU IFIs, 2025).

As regards the involvement of Independent Fiscal Institutions (IFIs), most governments did not actively engage them in the endorsement or assessment of their MTPs prior to submission to the European Commission. Out of the twenty-one Member States that submitted a plan, only twelve requested their IFIs to validate the macroeconomic assumptions underpinning the proposed net expenditure paths. Even fewer formally mandated their IFIs to conduct a comprehensive assessment of the full MTPs. Despite this limited formal involvement, a significant number of IFIs undertook assessments of the Plans on their own initiative.

While time constraints and limited experience in some IFIs may have restricted public debate during this first round, the central role of MTPs in the new economic governance framework clearly calls for increasing participation of national stakeholders.

It is important to recognise that the limited involvement of national parliaments and Independent Fiscal Institutions (IFIs) in the first implementation cycle of the new framework reflects, above all, a lack of political will. In the case of IFIs, although the spirit of the reform explicitly endorsed the objective of strengthening their role in fiscal oversight, many institutions performed their functions either because they were already legally mandated to do so at the national level, or out of their own initiative—not because they enjoy strong legal backing under EU law.

In particular, under the new European framework, a Member State may request its Independent Fiscal Institution (IFI) to issue an opinion on the macroeconomic forecast and the underlying assumptions supporting the net expenditure path prior to the submission of its Medium-Term Plan. However, it is only eight years after the entry into force of the regulation that such opinions will become mandatory —and only on the condition that the IFI concerned has developed sufficient technical and institutional capacity. In addition, Member States may ask their IFI to provide an ex post assessment of compliance with the net expenditure path and to analyse the factors contributing to any deviation. Under the corrective arm of the framework, Member States may also invite the IFI to assess the adequacy of the measures taken —or planned— to address an excessive deficit. However, none of these provisions are binding, which raises questions about the consistency and enforceability of national fiscal oversight

As Blanchard et al. (2021) and others have suggested, granting national fiscal councils and the European Fiscal Board a more decisive role in assessing rule compliance could enhance both the credibility and the effectiveness of the framework. Independent Fiscal Institutions (IFIs) can play a pivotal role in bringing transparency to public budgets and enhancing public understanding of fiscal policy. National IFIs are particularly well positioned to deliver independent, technically robust, and country-specific analyses. Compared to the more standardised tools and methodologies applied at the supranational level, they possess a clear comparative advantage in terms of a deep understanding of national idiosyncrasies, such as decentralised governance structures, institutional arrangements, and procedural specificities in the budgetary cycle.

Such granular expertise enables IFIs to assess whether fiscal rules have been respected by Member States and, in doing so, to increase the reputational costs of non-compliance (Beetsma, 2023). In addition, IFIs contribute to strengthening national ownership of the framework by mitigating perceptions of "Brussels-imposed" rules (Kamps and Leiner-Killinger, 2019).

It is therefore surprising that stronger participation by both national parliaments and IFIs was not made mandatory under the new framework. The experience of the EU's fiscal governance to date suggests that political commitment and genuine ownership have remained weak. The Fiscal Rules Compliance Tracker developed by the European Fiscal Board (Larch and Santacroce, 2020) document only moderate compliance with the key provisions of the framework. Moreover, empirical research has shown that non-compliance tends to be more frequent in countries with fragmented governments and during election years, a situation that, regrettably, is all too common across many European economies today (Delgado-Téllez et al., 2017).

Strengthening the role of Independent Fiscal Institutions (IFIs) and the European Fiscal Board (EFB) could also help reduce the opacity of exchanges between the European Commission and Member States (the risk of bilaterality). The French case provides a striking example of this challenge. Following the Commission's evaluation of the French plan, the national budgetary process collapsed, leading to the fall of the government. The newly appointed government subsequently sent a letter to the Commission requesting amendments to the MTP. However, none of the exchanges between the French authorities and the Commission were made public —not even to the Finance Ministers at the ECOFIN Council— prior to the adoption of recommendations on France's net expenditure path on 21 January 2025. The letter in question was only published after the Council had voted.

Supranational institutions such as the EFB are crucial to make sure there is a common level playing field, to ensure that countries in equal circumstances are equally treated, and to detect how the whole framework is performing, looking for example to the policy mix at the euro area level.

3.4. METHODOLOGICAL AND ANALYTICAL CHALLENGES OF THE NEW FRAMEWORK

On more technical grounds, the new governance framework has introduced broader changes in the analytical foundations of fiscal surveillance. Debt Sustainability Analysis (DSA) now takes centre stage as the main anchor for fiscal policy formulation, contrary to the past when DSA mostly served as an ex post analytical tool for surveillance.

However, as emphasised in a series of background papers prepared for the European Parliament (Cotarelli, 2024; Wieland, 2024; Erce, 2025; Jousten, 2025), formally anchoring fiscal policies to Debt Sustainability Analysis (DSA) presents significant methodological and practical challenges. These studies do not question the value of the DSA framework per se, but rather critique specific methodological choices made by the European Commission. Because numerous assumptions and modelling decisions can significantly influence the adjustment path, these authors call for regular, independent assessments of the realism of key assumptions and resulting debt dynamics—ideally carried out by national Independent Fiscal Institutions (IFIs).

Several areas for improvement are highlighted:

- **Risk assessment and stress testing:** Most papers stress the need for more robust risk assessments to ensure that debt-to-GDP ratios follow a sustainable downward path even under adverse conditions. In practice, this would require conducting proper stress tests during the adjustment period, not just after it. Although the framework includes a stochastic analysis, it is only applied once the adjustment period (4–7 years) has concluded. During the adjustment phase itself, uncertainty is modelled through deterministic scenarios, which may substantially underestimate fiscal risks.
- **Unobservable indicators and the structural balance:** Core concerns persist regarding the estimation of potential output and the structural primary balance—both unobservable variables that play a key role in the framework. In practice, the Commission continues to base its calculations on the structural primary balance and subsequently converts these into net primary expenditure targets through a technical formula.
- **Uniform fiscal multipliers:** The use of a single fiscal multiplier across all countries fails to account for national differences in economic structures, cyclical positions, and fiscal capacity. This uniformity risks distorting the projected impact of fiscal consolidation measures.
- **Definitional ambiguities in net expenditure:** The determination of net expenditure also raises conceptual challenges. The distinction between discretionary

and non-discretionary revenue measures is far from clear-cut. For instance, the non-indexation of tax brackets illustrates how such measures can blur boundaries in a way that affects fiscal projections.

- **Safeguards and potential procyclicality:** The inclusion of fiscal safeguards reflects a degree of mistrust in the DSA-based approach among some Member States. However, these safeguards may introduce unintended procyclical effects and constrain the capacity to scale up public investment. In particular, in countries where these constraints are binding, any increase in public investment (excluding defence) must be offset one-to-one by cuts elsewhere in spending. This makes it more difficult to implement ambitious investment programmes, even if they are aligned with long-term fiscal sustainability objectives (Darvas et al., 2024).

Despite these technical concerns, only experience will tell whether this new approach delivers better outcomes. Under the previous framework, the required fiscal adjustment was determined ex ante through a mechanical “matrix of requirements” applied uniformly across countries, often disconnected from their actual fiscal positions. By contrast, the new framework calibrates fiscal adjustment on the basis of a country-specific DSA, which is conceptually sounder —even if it involves greater complexity and technical judgment. Ultimately, time will reveal whether the new rules are more effective in ensuring the long-term sustainability of public finances.

4. CONCLUSIONS

The reform of the EU fiscal governance framework marks a conceptual improvement over the previous system. It introduces a more country-specific and risk-based approach to fiscal surveillance, grounded in debt sustainability analysis (DSA), and seeks to provide Member States with greater flexibility to support growth-enhancing policies while ensuring debt sustainability. The move to a single operational indicator —net primary expenditure— and the possibility of extending the adjustment period in exchange for reforms and investment represent significant steps forward. By creating a more reasonable and adaptable framework, the reform also raises expectations of improved compliance.

However, we should remain vigilant about the potential shortcomings of the new framework and avoid falling into complacency . The experience with the previous system suggests that the core problems were not so much a lack of flexibility, but rather unpredictability, legal ambiguity, and increasing complexity. The incentives that governments face have not fundamentally changed. Granting greater control and flexibility does not, by itself, guarantee better compliance, particularly if not accompanied by stronger enforcement and oversight.

While anchoring fiscal policy to DSA is conceptually sound, it introduces new layers of technical complexity. Debt sustainability projections rely on a wide array of assumptions —many of which involve unobservable variables and country-specific parameters.

The effectiveness of the new framework in reducing debt in a sustained and credible manner will thus depend heavily on the robustness of implementation. In this regard, the decision not to significantly strengthen the role of Independent Fiscal Institutions (IFIs) represents a missed opportunity. Their limited role weakens the framework's transparency, replicability, and accountability.

The first test of the new framework —accommodating increased defence spending— has already revealed the limits of a nationally fragmented response to shared challenges. While the proposal for the activation of the national escape clause has enabled some flexibility, it has done so in a manner reminiscent of past ad hoc adjustments, rather than through a collective, forward-looking fiscal strategy.

Moreover, the entry into force of the new framework coincides with a particularly complex geopolitical and macroeconomic environment. The EU faces growing public investment needs in areas such as security and defence, energy transition, ageing, digitalisation, and industrial competitiveness. History shows that EU fiscal rules have often been reformed in response to external shocks. The risk of pushing the current framework to provide maximum flexibility in light of these pressures could ultimately undermine debt sustainability. Germany's constitutional reform and France's fiscal fragilities further underscore the difficulty of enforcing consistent rules across politically and economically diverse Member States.

In such demanding circumstances, a more fundamental rethinking of the EU's fiscal architecture is warranted. The European Union and the euro area would be better equipped to confront future challenges with a genuine common fiscal capacity —financed by increasing own resources and underpinned by the ability to issue common debt— while simultaneously strengthening incentives for compliance with fiscal rules and reinforcing the role of independent fiscal institutions, both at the European and national levels. Until such reforms are enacted, Europe's fiscal governance will remain vulnerable to the same tensions and limitations that have undermined its credibility in the past.

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5. ARE FRANCE AND GERMANY THE SICK MEN OF EUROPE?

Isabelle Mateos y Lago [1]
BNP Paribas Chief Economist

The original "Sick man of Europe" was the Ottoman Empire; subsequently the phrase was used again to refer to another Empire on its way to downfall, the Austrian one. In more recent history, it's been used time and again to refer to a country going through a rough growth patch, with social discontent and a clouded outlook. France and Germany clearly do not meet the first definition—apart from not being Empires, they remain peerless and unchallenged in the EU in terms of dominant economic size and attractiveness to FDI, among other metrics. But they earned themselves the "sick man" label before, and again the question is being asked, not without reason: indeed, since the pandemic, both been have facing economic, social and political challenges. This being said, many if not all of these challenges are shared with a number of other European economies; and both stand a good chance of tackling these challenges in the next 5 years. Naturally, the efforts underway across Europe to address common weaknesses—weak productivity growth, aging populations, lagging innovation, high energy costs, along with the renewed impetus of rearmament efforts, will also benefit its two largest economies. Indeed, they are particularly well placed to benefit disproportionately from the rearmament effort owing to the scale of their respective defense industries.

1. FRANCE AND GERMANY HAVE BOTH UNDERPERFORMED SINCE THE PANDEMIC

From 2019 to 2024, Germany's GDP grew by just 0.3% and France's by 3.6%, below the average of 5.2%. Poverty increased in both countries—up 2.3 percentage points in France and 0.7 in Germany since 2019. Productivity growth has been particularly

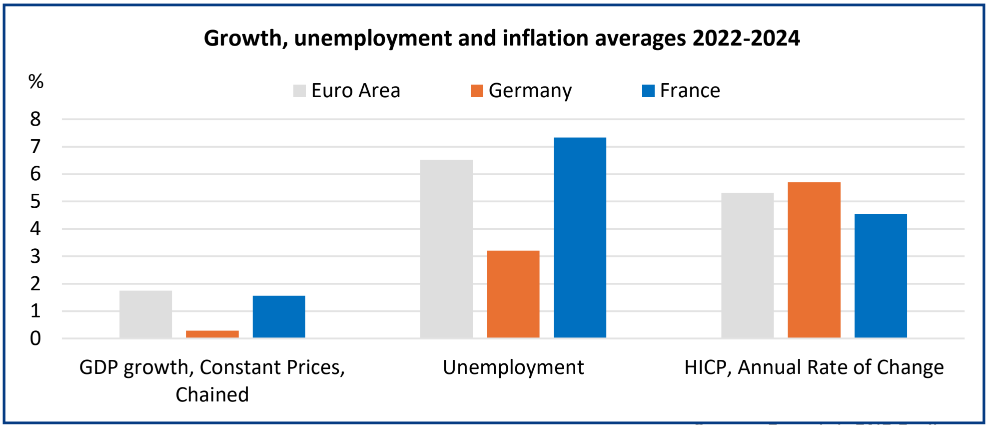
[1] **Acknowledgments**: Inputs from Stéphane Colliac, Leslie Huynh and Marianne Mueller, all economists at BNP Paribas Economic Research, are gratefully acknowledged.

weak in France. The growth potential of both countries has weakened markedly and is now estimated to be just between 1 and 1 ¼% in France and only around 0.5% in Germany.

In terms of "misery index", France and Germany have been afflicted by a different mix: Germany has kept a low unemployment rate, but its inflation has been higher than the Eurozone average, averaging 5.15% from 2021 to 2024, 45 basis points above the eurozone and 115 above France. It peaked at 10.9% in Q3 2022, surpassing the eurozone's 9.9% peak (see chart 1). By contrast, inflation in France has been markedly better behaved than in most of the Eurozone; but its unemployment rate remained relatively high, never falling below 7%–albeit this is an historically low rate for France. This point to another specific French weakness, namely relatively high structural unemployment.

Perhaps unsurprisingly then, both countries have seen a rise in the popularity and vote share of anti-system populist parties from both sides of the political spectrum. In the 2025 German federal election, the far-right AfD party came in second with 20.8% of the vote, double its share in the previous election in 2021. The left-wing Die Linke and far-left Bündnis Sahra Wagenknecht (BSW) parties won a combined total of 13.8% (8.8% and 4.97%, compared with 4.9% in 2021). In France, the Rassemblement National (RN) came out on top in the 2024 European elections with 31.4% of the vote. The RN and its allies won 33.22% of the votes in the 2024 legislative elections, the highest score ever achieved by the party, nearly twice as high as in the previous legislative elections, and ahead of the presidential coalition.

Chart 1.



Source: Eurostat, BNP Paribas.

But France and Germany retain strong economic foundations that should ensure their continued economic dominance within the EU.

France and Germany together account for just over 1/3 of EU population and 40% of its GDP. Thus, it is no surprise that they should have an outsize weight in the EU's economy. But in some important ways, they outperform these two key metrics.

France and Germany dominate the European large corporate landscape, together accounting for 2/3 of the companies listed on the EUROSTOXX 50. They are also the EU's top two destinations for foreign direct investment, with France leading in recent years, and have been among the top recipients for many years. Germany has one of the highest R&D investment to GDP ratio in the OECD and is responsible for 11% of patents granted in Europe. It is also the top investor in AI R&D. While less active in R&D overall, France is also a leader in AI in the EU. This bodes well for the two economies' ability to position themselves as leaders in the industries of tomorrow.

Both countries enjoy high living standards. In 2023, Germany's GDP per capita reached $63.2k (PPP), compared to $54k in France and $53.8k across the EU. In terms of household adjusted disposable income, Germany ranks second in the EU, while France ranks 6th and stands over 10% above the EU average. Life expectancy stood at 82.9 years in France and 80.5 in Germany as of 2024. Reflecting the combination of high income and high savings rates in both countries, their households also hold substantial savings—EUR 573 billion in Germany and EUR 326 billion in France in 2024, together about half of the EU total.

Both have large, healthy and well-capitalized banking systems. France, in particular, is home to 4 of the 5 largest banks by assets in the EU and hosts four global systemically important banks (G-SIBs). As of Q4 2024, Germany's total financial assets amounted to EUR 4 trillion, while France's reached EUR 8.6 trillion, together representing nearly half of the euro area's total financial assets. The IMF recently delivered a clean bill of health to the French banking system, writing that "banks' solvency and liquidity positions are robust, with adequate buffers. Sound prudential measures are mitigating housing market risks as property prices stabilize, while risks to the banking sector from corporate indebtedness and sovereign exposures remain manageable. Notwithstanding high uncertainty, financial stability risks remain contained, with French banks showing resilience under severe geopolitical and recessionary stress test scenarios, applied in the context of the IMF's 2025 Financial Sector Assessment Program (FSAP)."[2] German banks, admittedly, continue to suffer from low profitability and associated vulnerabilities, reflecting limited progress in consolidating its over 1400 banking institutions.

Germany, unlike most advanced economies, has remained an industrial powerhouse in recent decades. At 18.3%, its employment share in manufacturing is the highest in the G7 (tied with Italy), and it has resisted better than most to the rise of China since the turn of the century. This has helped it generate steady large current account surpluses over recent decades; notably, it recently took over from Japan the spot of world's first creditor with net foreign assets worth USD 3.95 Trillion at end 2024.

True, France and Germany are both afflicted with adverse demographics, with Germany in particular expected to have by far the fastest shrinking working age population of any G7 country in the coming decade. But demographic headwinds are a problem shared with a majority of fellow EU member states. Immigration has been helping contain the natural shrinkage of the workforce, particularly in Germany. However, the po-

[2] France: Staff Concluding Statement of the 2025 Article IV Mission, IMF, May 2025.

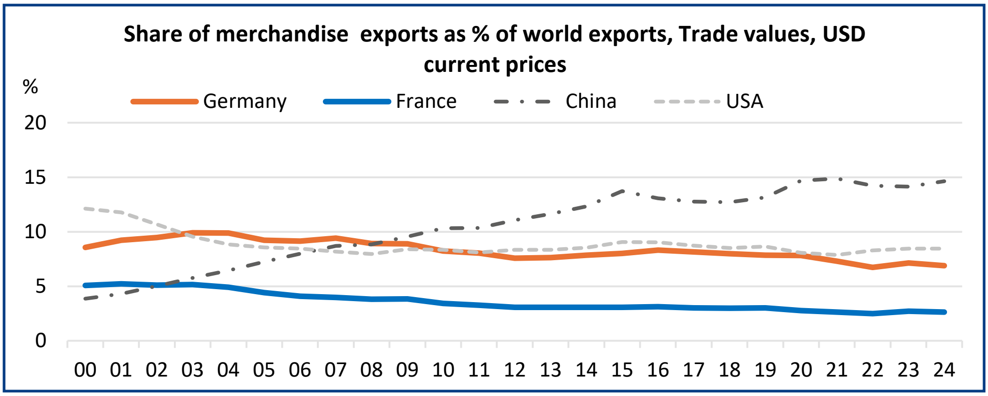
litical climate is not favorable to further expansion. In fact, the opposite is the case, nearly everywhere across the EU.

2. GERMANY'S PROBLEMS ARE STRUCTURAL IN NATURE, BUT NEW POLITICAL MOMENTUM PROVIDES AN EXCELLENT OPPORTUNITY TO FIX THEM.

Against the relative strengths identified above, Germany has 3 main challenges: a high exposure to global trade shocks; an energy-intensive, medium-tech heavy economic structure, combined with a fossil-fuels heavy energy mix; and a depleted public capital stock.

The German economy has historically been very dependent on foreign trade. Exports represented 42% of GDP in 2024, making it vulnerable to a slowdown in global demand such as the one expected to result from the recent US tariff rise. Compared to other large EU economies, it also has relatively high exposure to trade with the US. What's more, Germany has been losing global export market share in recent years: from 8,6% in 2000 to 6,9% in 2024, mostly to the benefit of China (see chart 2).

Chart 2.

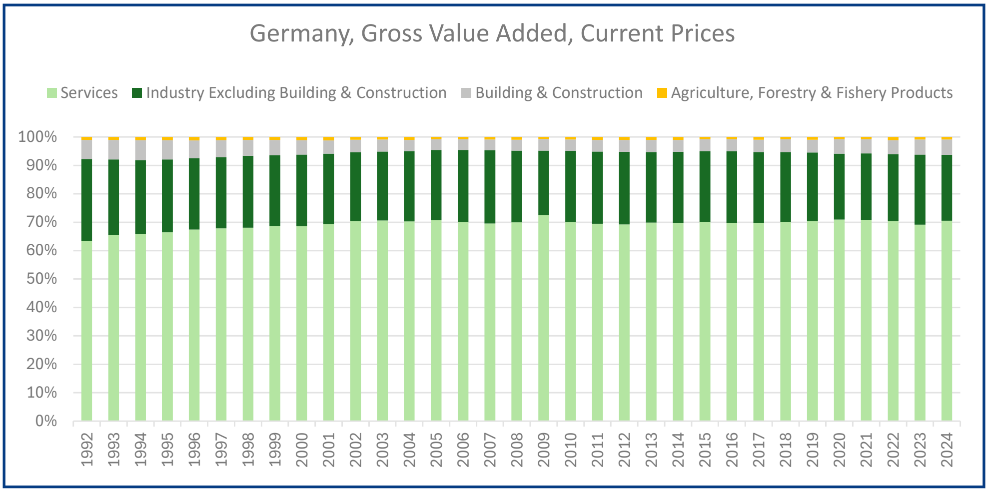


Source: WTO, BNP Paribas.

Germany suffered disproportionately from the energy price hike in 2022 because of its high dependence on fossil-fuels. Germany had strongly been dependent on Russian gas in comparison to other countries. When looking at energy PPI, prices rose by 100% during the summer of 2022 y/y. Since then, prices have slowly decreased but remain 54% higher than in the summer 2021. As the German economy relies heavily on energy-intensive industries (chemicals, metals, wood and paper, plastic products) and the automobile sector, industrial production has been struggling. Those sectors respectively account for 28.6% and 20.8% in 2022 (latest data available). The weight of energy-intensive industries is comparable between France, Spain and Italy but these—

especially France and Spain—can rely on a much higher share of renewable and, in the case of France, nuclear energy. Regarding the weight of the automobile sector, Germany is in a league of its own. That sector has been facing particularly strong headwinds owing the rise of Chinese automakers, particularly competitive in the EV segment (see chart 3).

Chart 3.



Public investment has been notoriously weak in Germany for the last few decades, placing it near the bottom of the EU league table. In fact, since the 1990s, public investment has been barely sufficient to offset depreciation.[3] This is likely to have played a significant part in Germany's weak productivity growth and decaying growth potential.

But the winds have started to turn more favorable and more dramatic changes lie ahead. The 2022 terms of trade shock has largely been absorbed. Energy intensive industries are still struggling, but positive employment creation has resumed in other parts of German industry. While attracting less attention than the old industries Germany is famous for, Germany is an emerging global leader in several high growth sectors, notably sustainability and climate tech, digital health, and industry 4.0 (e.g., 3D printing and other advanced manufacturing and supply chain technologies). It is well positioned in the upstream parts of advanced semi-conductors supply chains. Further, an old industry like Defense, another German stronghold, is having a strong revival. Even automobile production resumed rising in 2023. And the largest two German car makers accounted for 10% of global EV sales in 2023.[4] GDP growth surprised very positively in Q1 2025 (+0.4% q/q in Q1 2025). Industrial production over six months seems to be stabilizing, consumer confidence is improving, and economic indicators overall are encouraging

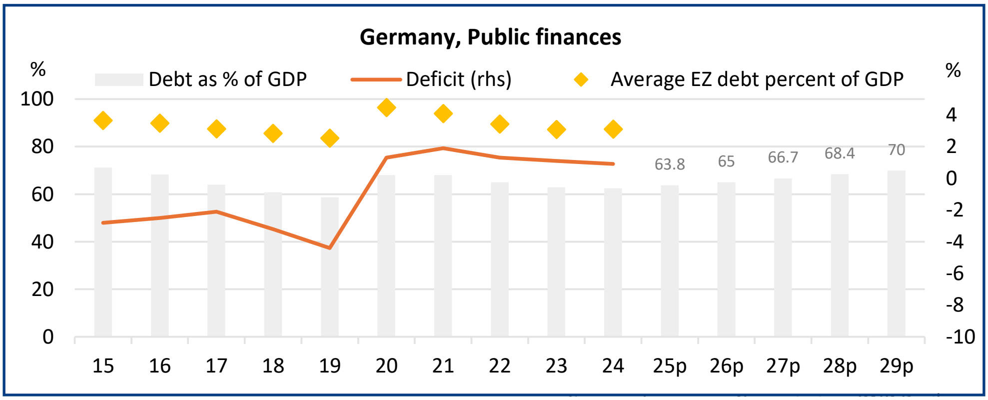
[3] A European Public Investment Outlook - 3. Public Investment in Germany

[4] Germany's Real Challenges are Aging, Underinvestment, and Too Much Red Tape, IMF, 2024.

(composite PMI at 50.1, gradual recovery in the manufacturing PMI and construction PMI at a two-year high; IFO which has been improving since last December).

Against this already encouraging background, the investment plan approved by the new governing coalition elected in March 2025 is set to be a game-changer. This plan, made possible by a constitutional reform of the "debt brake", provides for EUR 500 bn to be invested in infrastructure over the next 12 years, plus at least another EUR 500 bn to be invested in defense. This latter amount is not capped, however, and could in fact end up significantly larger in light of the emerging goal to bring Germany's defense spending to 5% of GDP rather than the initial goal of 3.5%. This is set to be the largest increase in public investment since the German reunification. Importantly, this reform also creates fiscal space for measures targeted to reducing the cost of energy. The German government under Friedrich Merz plans to tackle high electricity prices by reducing the electricity tax to the European minimum and capping grid fees. The goal is to lower the electricity bill by at least five cents per kilowatt-hour for households and businesses. Additional relief measures have also been announced for energy-intensive industries, though details remain vague. In the medium and long term, Chancellor Merz aims to accelerate the deployment of renewable energy and build 20 GW of gas-fired power plants by 2030, which should help stabilize prices and ensure supply security.[5]

Chart 4.



Source: European Comission, BNP Paribas.

By our estimates, consistent with those of the European Commission, German GDP could be 1.5% higher by end 2029 and up to 2.5% higher by 2035.[6] Thanks to a relatively low initial debt to GDP ratio, Germany should be able to finance this investment

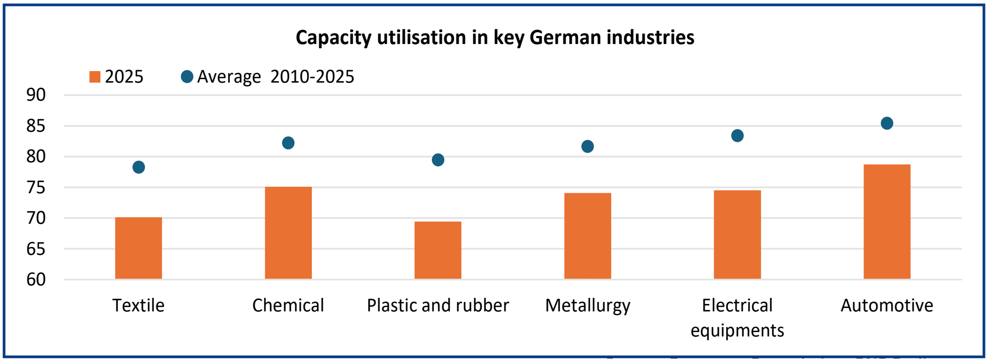
[5] While Chancellor Merz has also signaled greater open-mindedness to nuclear power, notably in the EU regulatory context, there is no intention to reopen the former German nuclear power stations shut down in 2011. Rather, the emphasis is on exploring new technologies: Small Modular Reactor (not yet developed in EU and with relatively limited usage), fusion (a very long-term objective before it becomes operational).

[6] The potential economic impact of the reform of Germany's fiscal framework - European Commission, May 2025.

surge without meaningful crowding out effect; on the opposite, this investment should help boost the productivity of private investment, generating a lasting increase in Germany's growth potential. As a result, we estimate Germany's debt to GDP ratio would reach only 70% by 2029 (See chart 4).

Will this investment plan prove inflationary? This concern exists but should not be overestimated. The impact of Germany's new public investment plan on inflation should, in itself, remain limited. This plan comes at a time when production capacity remains underexploited in several strategic sectors, providing headroom (see chart 5). Indeed, the German auto industry has already started converting idle capacity towards Defense production. The additional public spending will therefore mainly offset weak private demand. However, given a parallel increase in military spending at the European level, we could see rising input costs (raw materials, supply chains) and labor market tensions, particularly for skilled workers in strategic sectors. Despite these risks, upward pressure on prices should remain contained thanks to positive medium-term effects, with public investment expected to boost the productivity of productive capacity. As a result, we anticipate inflation of 2.3% in 2025 and 2% in 2026 in Germany. That said, Germany's cost competitiveness has eroded in recent years due to sustained wage growth and higher inflation than the average for other European countries. This trend is expected to continue, and as a result, Germany's real effective exchange rate is likely to continue to appreciate slightly in the coming years. This should contribute to further rebalancing of intra-EU external positions.

Chart 5.



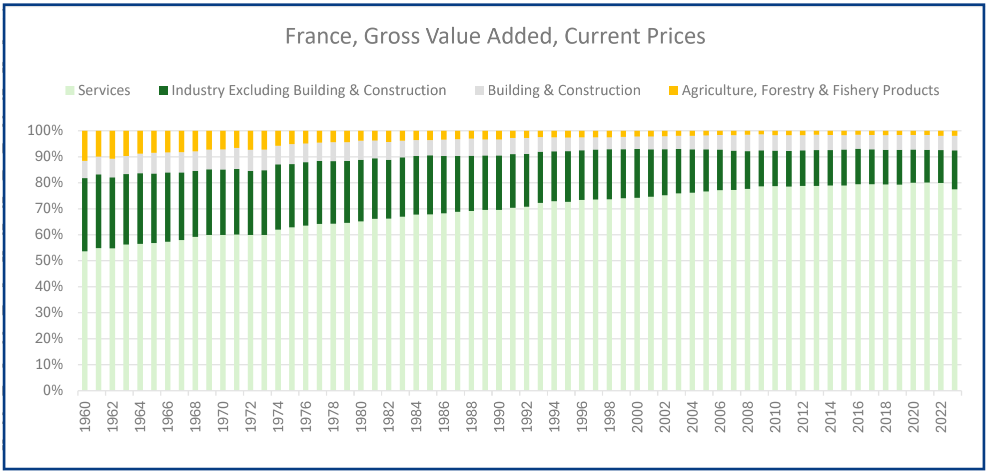
Source: European Comission, BNP Paribas.

Political dynamics are conductive to broader structural reforms that should help boost growth. The new German government has been elected for a five-year term. The two-party coalition (down from 3 in the previous parliament) facilitates compromise and allows for smoother coordination. The new government's economic platform emphasizes modernization and strengthening competitiveness. Beyond the public investment plan, other measures include tax reforms, incentives to foreign investment, reduction of bureaucratic red tape, and the relaxation of certain labor market rules.

3. FRANCE'S PROBLEMS ARE MAINLY FISCAL, HENCE "TECHNICALLY" EASIER; BUT THE POLITICAL CONTEXT MAKES IT HARD TO SOLVE THEM PROMPTLY.

France's economy has real structural strengths. Unlike Germany, France suffered severe de-industrialization in the last two decades, with its employment share in manufacturing falling by a record in the G7. But what is left of it (11% of GDP, roughly 5 pp below 2000) is highly competitive and high value-added (luxury, pharma, aeronautics). Moreover, France has a strong and vibrant service sector, driving growth through exports, investment and consumption (see chart 6). This service-heavy makeup of the economy reduces France's vulnerability to trade wars. France also benefits from low cost of energy thanks to early investment in nuclear power and large investment in renewables. As EU energy markets become more integrated, the French energy sector is likely to benefit.

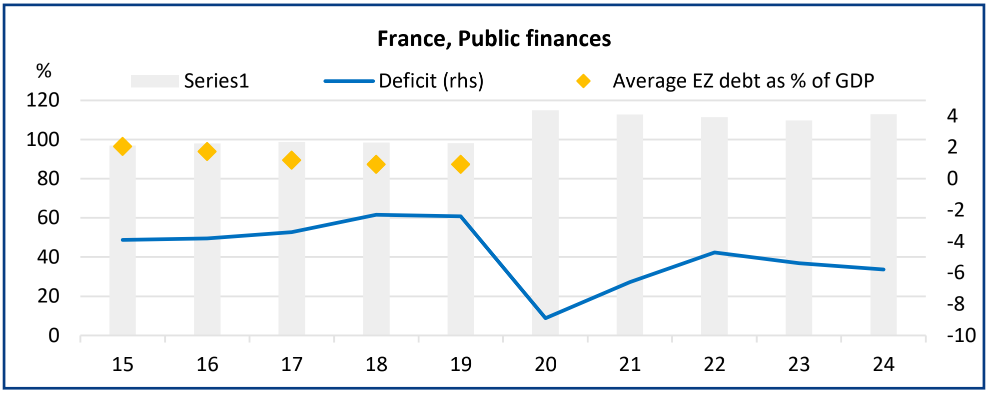
Chart 6.



Source: Insee, BNP Paribas.

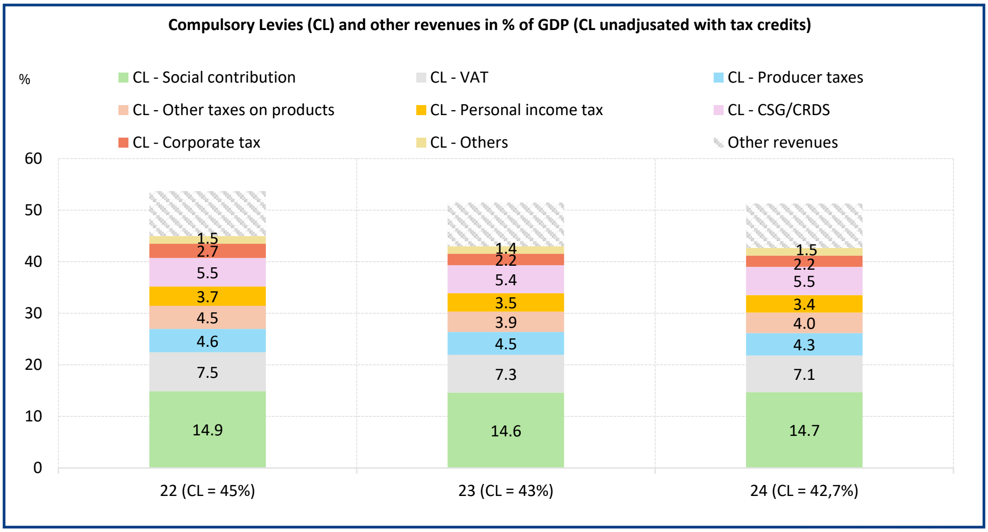
However, France has a fiscal problem. France is the only large country in the EU that hasn't managed to rein in its public debt to GDP ratio or its fiscal deficit in the post-pandemic period. The fiscal deficit increased significantly in 2023 and 2024, due to a decline in the public revenue-to-GDP ratio and a public expenditure-to-GDP ratio that still remains above its pre-COVID level. Alongside other reasons, (notably the impact on revenues of the slowdown in household consumption and the decline in real estate transactions on revenues), the decision to fully offset inflation through de facto indexation measures on revenues (indexation of income tax brackets) or expenditures (indexation of social spending) differs from that taken in other European countries. As a result, the public debt-to-GDP ratio returned to its 2021 level (113% of GDP) in 2024, while it declined elsewhere in Europe (see charts 7 and 8). There are now clear signs of crowding out effects on both consumption and investment owing to high taxation and fears that it is about to get even higher.

Chart 7.



Source: European Comission, BNP Paribas.

Chart 8.

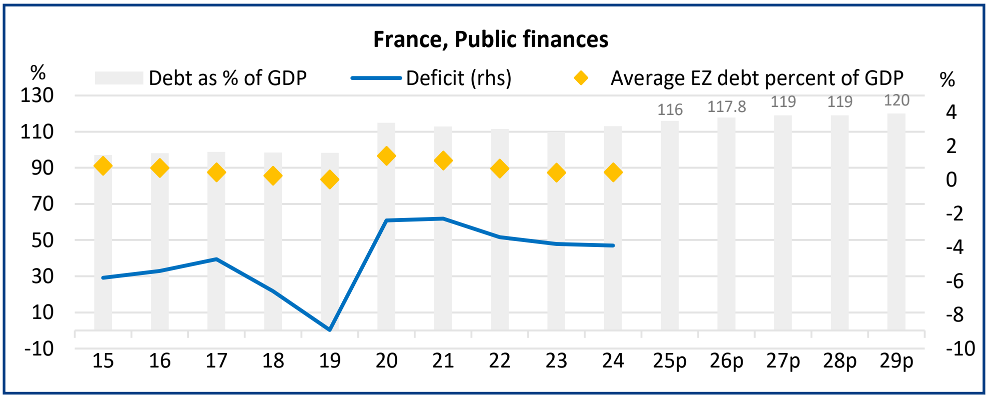


Source: Insee, BNP Paribas.

The 2025 budget should enable consolidation to resume (reducing the deficit from 5.8% to 5.4% of GDP). An increase in revenue is likely: end of the "gifts" of the inflation period; stabilization of real estate transactions; "exceptional" increase of taxes (corporate tax, tax on high incomes). However, the public spending-to-GDP ratio is expected to remain high.

In the medium term, fiscal consolidation should remain gradual in order to blunt its impact on growth and because two additional costs will weigh on the deficit: interest expenditure and military spending: +0.5pp per year on average between 2025 and 2029). To reach the government's target (3% of GDP in public deficit in 2029), an adjustment of 0.5 percentage points of GDP would be necessary per year, i.e. a primary effort of 1 percentage point of GDP per year (taking into account additional interest payments and military spending). Taxes on labour and production are both very high compared with peers. This means France needs to contain the growth of its public spending. Containing the growth of transfers to a sub-GDP rate and increasing the productivity of the public sector workforce would be the most growth-friendly ways to proceed (See chart 9).[7]

Chart 9.



Source: European Comission, BNP Paribas.

A particular challenge is that France's employment rate remains relatively low particularly among the youth and seniors, and it has a significant proportion of NEETs ("not in education, employment or training"). However, reflecting recent labour market reforms, the employment rate has been on a rising trend and reached an all-time high (since data records began in 1975) in Q1 2025. Budget consolidation will therefore benefit from reforms of incentives to work and hire. These issues are now all on the table, which allows hope for progress in coming years.

There is a risk that unforeseen factors could complicate this pace of consolidation. However, we believe that meaningful consolidation will take place over time, as long as a recession can be avoided, because there is now a wide consensus in the French society that public debt is too high and something must be done about it. Local government spending already appears to have slowed. State spending has already been cut. The most difficult point will be to slow down social spending, whose weight in GDP accounts for most of the increase in public spending compared to pre-Covid levels (1% of GDP). As wages are now rising more steadily than inflation, under-indexing social spending

[7] For further details see French Budget: The Hardest Part is Yet to Come, Stephane Colliac, May 2025.

to inflation could now be considered (a return to a policy that contributed to the fiscal consolidation implemented between 2012 and 2017).

French politics have been a complicating factor since last year's dissolution of Parliament, but the seriousness of the problem should not be overestimated. France's government lacks a majority in Parliament, a situation that is likely to persist until the next presidential election in May 2027. This makes it impossible to push through draconian reforms. However, discussions for the 2026 budget have been kicked off early this year, across all political forces, in the hope of forging a consensus acceptable to a wide majority. Could we see a "Liz Truss moment" in France? No, since there is wide consensus across political forces, and in public opinion, that fiscal consolidation is needed. Views differ only about the means to deliver it. Thus, even though a new no-confidence motion against the government cannot be ruled out, and it would be likely to generate some market volatility, any new government would need to remain committed to fiscal consolidation to have Parliament's backing.

4. WHAT DOES THIS ALL MEAN FOR EUROPE?

Inflation. Germany accounts for 27.6% of the HICP calculation for the eurozone in 2025, and France accounts for 19.1%. As we expect inflation in France to continue to undershoot the 2% target in coming years, and Germany to overshoot it slightly, our central scenario envisions inflation broadly at target from H2 2025 onwards, with ECB cutting its main deposit rate to 1.75% by end 2025, with rate rises resuming in H2 2026.

Interest rates. Bund yields have risen and are set to rise further as a result both of higher issuance volumes and higher growth expectations. While this trend will also affect other European countries, spreads with other member states should narrow slightly given a stronger overall growth outlook, particularly for countries showing progress in consolidating their public finances (as has been the case for the last few years already). Spreads could be further contained by further recourse to joint borrowing alongside national one to finance rearmament efforts, and even more in the event of conversion of part of the stocks of national debt into Eurobonds, an old idea that has burst back onto the stage lately[8]. At the same time, as ever, EU yields will be impacted by developments in US Treasuries yields. Historically, particularly since the 2008 Global Financial Crisis, the correlation between US and German government bond yields has been highly positive and often close to 1[9]. However, since the onset of the broad-based US tariff offensive and other US policy steps that have led global investors to question the safe haven status of the dollar, we have seen a partial decorrelation, seemingly caused by a partial redirection of safe haven flows toward European government bonds (EGBs).

Euro. During the sovereign debt crises of the early 2010s, the euro proved unexpect-

[8] See for example: Now is the time for Eurobonds: A specific proposal | PIIE ; How Europe should respond to the erosion of the dollar's status ; Now is the time to reopen the Eurozone bond debate

[9] See Growth is local, bond yields are global: why does it matter?, William de Vijlder, March 2025

edly resilient. This was because investors dumping periphery country sovereign debt tended to reinvested in core-EZ countries, leaving the overall demand for euros largely unchanged. That said, it could be argued that a sovereign debt crisis in France would be seen to threaten the existence of the euro itself and as such might lead to capital outflows from the EZ at large. This is very much a gray swan in our view, and a far more likely scenario is that as the EZ's 2 largest economies regain health and dynamism, more global capital is drawn into the region, and the euro appreciates as a result.

Financing of European public goods. Germany's rearmament carried out through a national initiative does not in any way hinder the pursuit of joint projects at the European level. The decision to favor national deficit spending over financing through European mechanisms is based on cost considerations, as Germany benefits from more favorable financing conditions. In any case, Chancellor Merz's has explicitly indicated being open to discussing more financing of European public goods. From the French perspective, the more European public goods can be financed at EU level, the easier it will be to reconcile its own fiscal consolidation needs with its undaunted aspiration to strengthen European sovereignty. Were Euroskeptic parties to take power in 2027 following the Presidential and legislative elections, it is conceivable that they would press for a reduced French contribution to the EU budget negotiations on the 2028-2034 multi-annual financial framework should be substantially completed by mid-2027. As a result, the earliest opportunity to press for a smaller EU budget would not come until negotiations about the 2035-41 budget. However, given the timing and pluri-annual nature of the EU budget process, they earliest opportunity to press for a smaller EU budget would not come until negotiations about the 2034-2040 budget.

5. IN SUM

While France and Germany have both being going through what may be described as a rough patch, the conditions are ripe for their convalescence, which has begun, to gather momentum. This trend will both support and be supported by broader EU-level efforts to seize the opportunity created by the historic pivots in US domestic and international policies and execute on plans to rearm Europe and on the full set of EU-level reforms identified last year in the Letta and Draghi reports: deepen the Single-Market, boost productivity and innovation, complete the capital markets union, complete the EU's energy transition.

6. EU FINANCIAL SECTOR: COMPETITIVENESS, SIMPLICITY, DEREGULATION?

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"Everything should be made as simple as possible, but not simpler".
(Albert Einstein)

1. INTRODUCTION

Financial regulation follows long cycles that are mostly explained by financial crises and their impact on the policy-makers' balance between efficiency and financial stability goals. The 1929 crisis triggered a regulatory tightening that lasted until the 1970s, when a deregulation trend started, culminating in (and arguably contributing to) the global financial crisis of the late 2000s. We are now in a regulatory tightening phase that has lasted more than 15 years. Some voices are already calling for deregulation, arguing that the balance moved too far in the direction of financial stability, at the cost of reducing efficiency in the financial sector and limiting its contribution to economic growth and its ability to innovate. As a side effect of the regulatory tightening we observed a rechannelling of financial flows to non-bank financial intermediaries, including some segments that are little or not regulated at all, such as cryptoassets. It remains unclear whether, when and where a new trend in the direction of deregulation will materialize.

In this context, the second Trump presidency and the watering down and delay in the implementation of Basel III in the UK and the US (where it might even not be adopted) has triggered a debate in the EU on the desirability of a regulatory pause, simplification or correction. The Draghi and Letta reports have contributed to this debate, fueled by the awareness of the subdued economic performance of the EU as compared to the US, also reflected in much worse results in the Stock Exchange over recent years, including in banks' market value.

This article addresses several related questions: Is it time for a deregulation cycle, or for a regulatory pause or simplification? Where is it more likely to materialize? What are the implications for international regulatory coordination and the Basel standard setting process? Is excess regulation behind the worse performance of the EU economy, Stock Exchange and financial sector as compared to the US or are there other reasons? Is regulation to blame for the lack of digital champions in Europe? To the extent that regulation explains, at least partly, the European underperformance, what can be done to correct it?

The main conclusions are as follows: (i) fragmentation of the theoretical single market is probably the most important factor in explaining EU banks underperformance as compared to US banks, together with environmental and structural factors, but regulation is also playing a role; (ii) the EU regulatory activism (especially in new fields) is mainly attributable to the EU Commission desire to avoid inconsistent national regulations; (iii) the restrictive bias of EU regulations is mainly a result of the recent proliferation of new regulatory and supervisory agencies with narrow mandates that compete among themselves (and also with some pre-existing national agencies) in terms of orthodoxy, thus creating uncertainty on the part of financial institutions; (iv) the EU would benefit from an explicit inclusion of competitiveness objectives in the mandates of some agencies, in particular the Single Supervision Mechanism (SSM), in line with the recent UK reform, and from a strengthened accountability of the agencies; (v) the simplification exercise initiated in the EU should be ambitious and go beyond the current focus on the climate change area and simplification of SMEs reporting; (vi) the impact analysis of regulations should be strengthened, putting more clearly the burden of the proof on the need to regulate. Some specific recommendations and lines for action are included in the final section.

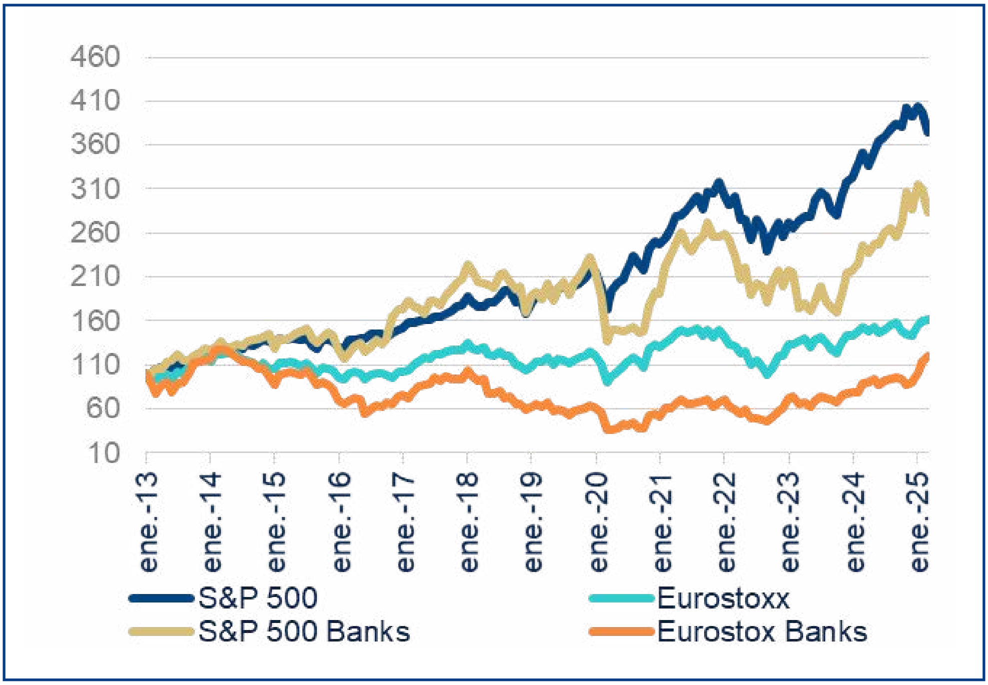
2. DOES REGULATION EXPLAIN THE UNDERPERFORMANCE OF EU VS US BANKS?

The EU Stock Exchange has underperformed US markets over the last decade, as can be seen in chart 1. The EU banking sector also underperformed its US counterparts over recent years, which almost doubled the results of EU banks in local currency and more than doubled it in US dollar terms.

Some private sector stakeholders have argued that the EU banks' underperformance is mostly related to an excessive regulatory burden[1]. This was recently acknowledged by the Governors of the central banks of Germany, France, Italy and Spain in a letter to the President of the European Commission. According to this view, there is a perception that the EU may be imposing stricter requirements than those established by international standards or applied by other jurisdictions. This perception has been reinforced by the recent debate surrounding the finalization of Basel III, already approved in the EU but considerably relaxed and postponed in the UK, and which appears to be moving in a similar direction in the US, where it might not be implemented at all following Trump's election.

[1] See for example https://www.eacb.coop/en/studies/eacb-studies/less-is-more.html

Chart 1: Stock Exchange indices in US and the EU: overall and banks.



Source: Bloomberg.

However, this contrasts with the fact that the Basel Committee considers the EU "materially non-compliant" with risk-based capital standards, whereas the U.S. is considered (so far) "largely compliant". It is important to take into account that the Basel agreement is limited to internationally active banks, with the implication that Basel overlooks the fact that the US applies the standards only to a handful of big banks with overseas operations, whereas the EU applies them to all banks. In fact, the crisis of some U.S. regional banks in the spring of 2023 has been largely attributed to more lenient regulation and, above all, supervision of medium and smaller entities, which fall outside the scope of international standards.

Overall, financial regulation in the EU is harsher than in the US in some aspects but looser in others:

- In the field of prudential regulation, the US follows a much stricter policy for Global Systemically Important Banks (GSIBs), but it is significantly looser for the rest of banks, in application of the principle of proportionality, whereas in the EU most regulations apply to all types of institutions, big and small. US banks benefit from lower minimum regulatory capital ratio requirements as a result of a simpler capital buffer structure. Both US and EU systemic banks are subject to GSIBs buffers. But on top of that US banks have only stress capital buffers, whereas EU banks are subjected to O-SIIs buffers (for domestic systemic banks), systemic risk buffers, countercyclical buffers and pillar 2 buffers. EU banks are also subjected to Minimum Required Eligible Liabilities (MREL) whereas in the US loss-absorbing debt is absent, except for GSIBs (in the form of Total Loss Absorbing Capacity, TLAC, which also affects EU GSIBs).

- European banks benefit on average from a more risk sensitive and granular approach to calculate risk-weighted assets (RWA) due to the more intensive use of internal models, which leads to lower RWA density and consequently a lower leverage ratio and volume of capital in absolute value for a given size. This has been partly corrected by the introduction of the output floor in the recent finalization of Basel III, which will be introduced gradually in forthcoming years. There is scope of the EU to move further towards the of the standard approach in the calculation of RWAs.
- Regarding consumer protection, in the US it depends crucially on who runs the Consumer Financial Protection Bureau (CFPB). Democrat administrations typically appoint stricter Directors whereas Republican administrations appoint Directors that are less aggressive in their policies[2]. In the EU consumer protection is mostly a national (or even regional) competence, although some directives harmonize certain aspects at EU level. The swings in the US administration and the heterogeneity in the EU make it difficult therefore to compare US and EU regulations in this field.
- The US has a harsher regulation on anti-discrimination & fair lending (although this may change with the Trump-2 administration) as well as on consumer redress (with the possibility of class actions).
- In the area of payments, the EU regulations on PSD-2 and Open Banking were more pro-consumers than in the US, and are now in the process of additional tightening with PSR and FiDA, respectively. In the US the attempts to introduce Open Banking regulations have not succeeded so far.
- Privacy laws are stricter in the EU with the General Data Protection Regulation (GDPR), although it is not specific to the financial sector. The same can be said as regards Artificial Intelligence, with the AI Act.
- On cybersecurity and operational resilience, the EU regulation (DORA) is stricter.
- On Anti Money Laundering (AML) the EU regulation has been reinforced with the 6th Anti-Money Laundering Directive (6AMLD) and the new Authority (AMLA) that is creating a more unified EU framework. The US Bank Secrecy Act (BSA) and PATRIOT Act have strong enforcement, but the fragmented structure sometimes reduces effectiveness.

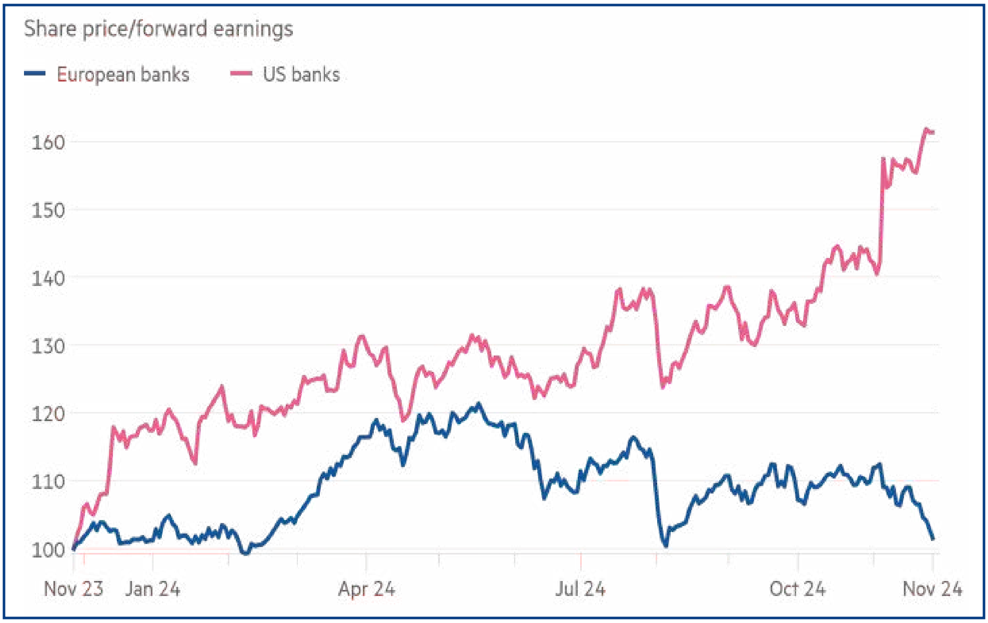
One may conclude from the above that, although there is not a clear-cut pattern as regards the degree of tightness of financial regulation across both sides of the Atlantic, overall the EU regime is probably harsher. But this does not imply that regulation is the

[2] On February 11, 2025, President Trump appointed Jonathan McKernan as Director of the CFPB, who is expected to significantly reduce the activity of the institution and soften its policies.

main reason for the worse market performance of EU banks in the Stock Exchange. Other factors considered together seem more important:

- The macroeconomic environment, with higher growth and interest rates in the US, is probably a key factor. When comparing Price to forward Earnings ratios, US banks clearly outperformed EU banks systematically in the recent period (see chart 2). This suggests that the markets expect this outperformance to be maintained in the future.

Chart 2: The valuation gap between US and European banks has widened.



Source: Bloomberg.

- Fragmentation is a key factor. The EU is a very fragmented market, with an unfinished banking union and banks that remain largely national. In the US, although there is some state level segmentation for smaller banks, the big players have a US-wide dimension. In the list of the ten biggest banks in the world by market capitalization there are no EU banks and five US banks.
- Regarding the business model, US banks have a larger turnover of their loan portfolio, with a lower dependence on retail mortgages, and a higher deposits' base and less proportion of debt securities. US banks' net interest income is driven by higher asset yield and lower funding costs than Eurozone banks.
- Partly as a result of the faster turnover of their balance sheet, NPLs are structurally lower in the US than in Europe. The US clean-up process of NPLs is faster. The Cost of Risk is more volatile in the US.
- Overall, efficiency is worse in Eurozone banks than in the US. The lower weight

of operating expenses as a percentage of total assets in Europe is more than offset by the lower capacity to generate revenues in the EU[3].

- Public sector support also favors US banks, in particular in the mortgage market. The Government Sponsored Agencies, Fannie Mae and Freddie Mac, allow the transfer of US banks mortgage lending risk, freeing up their balance sheet and using the proceeds to fund new mortgages. In contrast, in the EU state aid rules are very strict, as a mechanism to ensure a level playing field in the (theoretical) single market. A paradoxical outcome of this is that securitizations in the US have managed to overcome the stigma of being the origin of the 2007-08 Global Financial Crisis, whereas in the EU (where the problems with this market were comparatively minor) the same international standards almost killed the securitizations market, despite the efforts of several subsequent regulatory reforms.

All in all, it seems clear that the better behavior of US banks in the Stock Exchange is explained mostly by environmental and structural factors rather than regulation, although regulation may be playing a role as well. Furthermore, there are certain features in the EU regulatory framework that may introduce a restrictive bias, as will be explained in section 3 below.

3. THE RESTRICTIVE BIAS OF EUROPEAN REGULATION

The Global Financial Crisis revealed profound failures in financial regulation and supervision and led to a reassessment of the regulatory architecture in the EU. At the same time, one of the solutions to the crisis —the Banking Union— required the creation of new institutions at the European level that overlapped to a certain extent with national agencies (none of which was discontinued, to my knowledge). To avoid the conflicts of interest of regulators having multiple objectives, the trend was to set up agencies with a single clear task: microprudential, macroprudential, conduct, resolution, consumer protection, payment systems, lending in resolution, deposit insurance… This proliferation of institutions, duplicated at EU and national level (and in some cases also at the Eurozone level), is making the EU regulatory architecture increasingly complex.

These new institutions are still in the process of establishing their credentials and scope of action: the European Banking Authority (EBA), which develops secondary regulation and ensures its consistent application; the Single Supervisory Mechanism (SSM), which directly supervises significant entities; the Single Resolution Mechanism (SRM), which ensures that larger entities have adequate resolution mechanisms; the European Systemic Risk Board (ESRB), which harmonizes macroprudential policies, are some of the institutions created in the last 15 years. This proliferation complicates

[3] See Resti et al (2025): How have European banks developed along different dimensions of international competitiveness? https://www.europarl.europa.eu/RegData/etudes/IDAN/2025/764380/ECTI_IDA(2025)764380_EN.pdf

coordination, especially in crisis resolution, and may lead to stricter application of standards, as these new authorities seek to establish their roles and scope of action. And probably more importantly, the lack of track record of these new institutions creates uncertainty on the part of financial institutions, which do not have a benchmark for their policies and therefore react also in a conservative way in their internal control policies, to avoid rule breaching.

The European Supervisory Authorities (ESAs), such as the EBA or the European Securities and Markets Authority (ESMA), have been developing level 2 regulations in recent years, which develop technical aspects of EU Regulations. They also develop level 3 regulations through Q&A processes to clarify their application. As this regulation gains prominence, this may also introduce a restrictive bias, partly because the experts drafting level 2 and 3 regulations tend to be those who negotiated and agreed the international standards in the first place, and may have a natural inclination toward a more orthodox interpretation than the legislators who drafted the level 1 regulations.

Another source of complication is the coexistence of institutions at the Eurozone and EU levels, in particular the SSM vs EBA. This implies that level 2 regulation is developed by an institution which is not the supervisor, contrary to what happens in the US or the UK, where both functions coincide in the same institution. The EBA is a relatively small institution that coordinates policies of supervisors that include a giant agency (the SSM) under the umbrella of the ECB, which is probably the most independent central bank in the world. In normal circumstances the regulatory role of the EBA should have been carried out by the SSM/ECB (in analogy with the UK and the US), but the peculiar configuration of the Eurozone (which does not include all EU members) explains this duplicity. The implications of this situation for democratic accountability will be discussed in section 6.

All the above-mentioned factors may introduce a conservative bias in EU financial regulation. Additionally, the absence of a common fiscal capacity in the EU, combined with strict regulation limiting state aid, means that some segments of the financial system lack public guarantees as in the U.S., with the result that similar regulations can have harsher effects in the EU due to the absence of public support. The above-mentioned case of Fannie and Freddie support to US securitizations is paradigmatic. Another example is the absence in Europe of a liquidity mechanism for resolution, which makes crisis management more rigid and potentially costly, and could trigger bank runs, undermining depositor confidence.

4. DIGITAL REGULATION: A BRAKE ON INNOVATION?

As mentioned above, the European Union tends to be a first mover in regulating new industries, new risks, or new technologies, particularly in the digital field. The General Data Protection Regulation (GDPR) adopted in 2016 set standards for privacy protection that later became a global benchmark imitated in many jurisdictions. The Digital Markets Act (DMA) and the Digital Services Act (DSA), both adopted in 2022, were also pioneers in regulating BigTech activities and their implications for competition. The EU was also the first major jurisdiction to regulate crypto assets in 2023 (through the Markets in Crypto Assets regulation, MiCA), and Artificial Intelligence in 2024.

One reason for the EU Commission to act relatively early in regulating new areas is to avoid a proliferation of potentially inconsistent national regulations. In this regard, the EU would benefit from greater clarity "ex ante" in the delimitation of national vs. EU competences in regulation, which is particularly complicated when applied to new fields like digital identity.

The EU regulatory process is slow and lengthy. On average it takes between 4 and 5 years from the initial proposal to implementation. Some recent examples are MiFID (6.5 years), DORA (4.5 years), MiCA (4 years) or PSD2 (4.5 years). In the digital field these delays imply that by the time the new regulation is applied the underlying reality has changed and often requires a new twist in regulation or refinements in level 2 and 3 legislations.

At the same time, there is concern about the lack of European digital champions compared to the impressive emergence of BigTechs in the US and China. The coincidence of these trends has led to suggestions that the underdevelopment of BigTechs in Europe may be due to excessive or premature regulation. More broadly, beyond the digital field, excessive regulation has often been blamed for the lack of dynamism in the EU economy compared to the "laissez-faire" approach of the US, especially in areas where innovation is a key component of success.

According to recent literature[4], it remains unclear whether excessive regulation penalizes digital EU firms. Other factors seem to play a more prominent role in explaining the lack of digital champions, such as fragmentation of the internal market, underdeveloped capital markets (especially for start-ups), punitive bankruptcy laws and restrictive immigration regulations, which limit talent attraction. Regarding the failure in the scaling-up of start-ups, labor market regulation setting relatively high severance payments is often also mentioned as a limiting factor. If the ratio of success of start-ups is between 10-20%, the temporary hiring of employees is incompatible with strong severance payments in case of failure. In other words, over-protective labor market regulation in the EU is incompatible with a strong innovative ecosystem[5].

Instead of Europe lagging in digital champions because of excessive regulation, the causality may well run the opposite way: the fact that the EU has fewer Bigtechs may explain its more restrictive regulation and antitrust policies in the digital field, since consumer protection is given a more prominent profile vis-à-vis foreign digital champions.

As a positive aspect of the European rush to regulate anything new, it has been argued that it is helping Europe to become a global standard setter, which favors Euro-

[4] Anu Bradford (2024): "The False Choice Between Digital Regulation and Innovation" (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4753107)

[5] Olivier Coste (2022): "Europe, Tech and War", https://www.amazon.com/Europe-Tech-War-Oliver-Coste/dp/B0BN2CZCHL

pean firms when competing abroad, because they play with home rules (the so-called "Brussels effect"). This might be true, but it depends crucially on whether foreign regulators adopt EU standards or develop more lenient local rules. In the field of banking, for instance, there is certain evidence that EU banks, being under EU laws in their activities overseas because of consolidated regulation and supervision, compete with stricter rules than their local competitors in many emerging economies, in what we may call "self-defeating extraterritoriality".

In the field of financial services, the asymmetry of EU data sharing regulation like Open Banking and more recently Open Finance (under discussion in the Financial Data Access Regulation, FiDA) implies a competitive disadvantage for banks, in the sense that specific financial sector regulations impose more demanding data sharing rules vis-à-vis non-financial players than horizontal regulations affecting all sectors. This approach penalizes EU banks vs non-EU Bigtechs. This is probably an unintended consequence of policies aimed at enhancing competition in the financial sector. The implementation of the Digital Markets Act, DMA, which develops rules for data sharing for gatekeepers, may attenuate this asymmetry.[6]

In the new regulatory frontier on Artificial Intelligence, the AI Act imposes more demanding requirements on AI systems in order to mitigate potential negative impacts in citizens' health, security and fundamental rights, reflecting also the EU concern with privacy and intellectual property protection. Although the AI Act approach is in line with European values, its interaction with previous regulations like GDPR complicates the use of AI in many fields and is leading some of the main AI players like Meta and Apple to declare that they will not deploy global AI systems in the EU, or will delay their implementation. The underlying problems point to GDPR requirements like the limit in the consent on the use of data by consumers to one specific purpose, or the data minimization principle, which are incompatible with the nature of AI systems. This restriction in the adoption of new technologies in the EU (which anyway has very little domestic capacity to develop such systems) may put EU companies and consumers at a disadvantage in the global context.

In the field of cryptoassets, the development of EU regulation (MiCA) in parallel to the work of global standard setters may consolidate the backwardness of the EU compared to the US. In contrast with previous examples, this may reflect a deliberate policy choice of regulation, given the mistrust of EU regulators towards cryptoassets.

To sum-up: although the lack of Bigtech champions in the EU cannot be attributed exclusively (not even mainly) to the impact of regulation, it may be a limiting factor. And in recent regulations concerning what is arguably the most important transformation in the world economy in recent years (AI), the combination of well-intended regulations with very strict privacy rules may leave Europe outside crucial forthcoming transformations.

[6] See Fernandez de Lis (2024): "European leadership in digital finance regulation: Pros and cons", in Duckbucks, Regulation in the age of digital finance, September 2024. www.duckbucks.com

5. COMPETITIVENESS, SIMPLIFICATION, DEREGULATION

The Draghi Report on European Competitiveness underscored the need for financial sector reforms, advocating for regulatory simplification and enabling mergers to foster dynamism. However, as I analyzed in a previous article[7], a stark contrast emerges between this vision and the stance of the ECB's Supervisory Board Chair, Claudia Buch, who, around the same time of the publication of the Draghi report, stated in the European Parliament that the SSM's mandate is strictly financial stability, not competitiveness. This divergence is further highlighted by Commission President Ursula von der Leyen's mission letter to the new Financial Services Commissioner, María Luisa Albuquerque, emphasizing competitiveness and sustainable finance as core priorities.

The UK's recent financial reforms, particularly the Financial Services and Markets Act 2023, explicitly integrates competitiveness into regulatory objectives. Section 3(2)(e) states that regulatory actions should "facilitate the international competitiveness of the UK economy and its medium- to long-term growth." Applying this new approach, Rachel Reeves, the Labor Chancellor of the Exchequer, noted in her first Mansion House speech that "these changes [the reform following the global financial crisis] have resulted in a system that sought to eliminate risk-taking. That has gone too far… the UK has been regulating for risk, but not for growth… We have sent letters on their growth-focused tasks to the Financial Conduct Authority (FCA), the Prudential Regulation Authority (PRA), the Monetary Policy Committee (MPC), the Financial Policy Committee (FPC), and the Payment Systems Regulator (PSR). These letters make clear that I expect them to fully support this government's ambitions for economic growth". Around the same time the Chancellor forced out the Chair of the competition authority (CMA) on the grounds that she wants pro-business decisions to drive prosperity and growth, and appointed a former BigTech executive as new Chair. And in another move to simplify the regulatory framework, the UK decided to include the Payments System Regulator under the FCA.

In the aftermath of the Draghi and Letta reports, the debate on whether and how to incorporate objectives in terms of competitiveness or growth in EU financial regulation has gained momentum, triggered also by the delay and watering down of the finalization of Basel III in the UK and the US. The Trump presidency also appointed Elon Musk for a special agency in charge of deregulation: the Department of Government Efficiency (DOGE). In the EU deregulation seems to be a bad word, but the EU Commission has put forward a Competitiveness Compass[8] and announced a simplification of regulation focusing initially on sustainability (where an Omnibus Directive has been presented), but that could (and should) also reach other files.

[7] Fernández de Lis, Santiago (2024): Competitiveness as an Objective of EU Financial Regulation, The International Banker, November 27, 2024.
https://internationalbanker.com/tag/santiago-fernandez-de-lis/

[8] EU Commission: A Competitiveness Compass for the EU, 29.1.2025
https://commission.europa.eu/document/download/10017eb1-4722-4333-add2-e0ed18105a34_en

The Competitiveness Compass elaborates on the three transformational imperatives to boost competitiveness identified in the Draghi report: (i) innovation, (ii) decarbonisation and (iii) strategic autonomy and security. In a characteristic European approach to deregulation and simplicity, instead of eliminating regulations currently in the pipeline whose need is not obvious (like FiDA en the Retail Investment Strategy, RIS), the Compass envisages 11 Acts and numerous strategies, initiatives, guidelines, plans, packages, frameworks… Among the potentially most powerful ideas is the 28th regime, a new streamlined EU-wide regime for innovative companies covering labor, bankruptcy and tax rules. It remains unclear whether Member States will support this proposal. A related proposal is the Competitiveness Lab, a procedure suggested by the Spanish government that allows a sub-group of EU countries to go ahead in terms of integration, to which other Member States may join in a future stage. However, some Member States, especially small ones, have criticized this two-speeds approach, and it is difficult to assess whether it may gather sufficient support. Another criticism is that the Compass focus on 'scaling up' start-ups risks worsening the threshold effects that keep European firms small.[9]

Shortly after the publication of the Compass the Commission made public the Omnibus initiative, focused on sustainability, with amendment proposals to several pieces of legislation. The Corporate Sustainability Due Diligence Directive (CSDDD) is postponed one year and the review clause for financial institutions is eliminated. The transition plans requirements are aligned with the Corporate Sustainability Reporting Directive (CSRD), which in its turn reduces by 80% the scope of companies covered, and a future revision to reduce data points is foreseen. A consultation was open regarding the taxonomy regulation, where the definition of Do Not Significant Harm (DNSH) and the reporting templates are simplified, but the Green Asset Ratio (GAR), which was the main concern of the financial industry, is not eliminated. These changes are not definitive and the process may be long, since the proposal will now enter a negotiation process.

Simplification is becoming a buzzword in EU regulatory debates. But complexity is to a certain extent embedded in EU Multi-Layered Governance System, which needs detailed and binding rules to prevent regulatory arbitrage inside the Single Market (see table 1 for a ChatGPT summary of the reasons why Europe regulates so much). The EU legislative process involves multiple layers of rule-making, interpretation, and enforcement (Level 1, Level 2 and Level 3 regulation, plus supervision) which implies that regulatory adaptation becomes a continuous process rather than a one-time compliance effort.

In the exercise of simplifying EU regulation there are a series of trade-offs that it would be better to avoid:

- Less European regulation should not be achieved in exchange for more national regulation. The simplification exercise should be done without creating addi-

[9] For a critical view of the Competitiveness Compass see Garicano and Garicano (2025): 20 thoughts on the Competitiveness Compass,
https://www.siliconcontinent.com/p/20-thoughts-on-the-competitiveness

tional fragmentation in the single market. Indeed, the simplification exercise perhaps requires reducing regulation mostly at the national level.

- Less Level 1 regulation should not lead to more Level 2 regulation. Broadening the scope of independent agencies without strengthening their accountability and clarifying the overlaps in their mandates risks increasing (instead of reducing) complexity (see section 6).
- For similar reasons, less regulation in exchange for more supervision does not look like the best approach. Supervision is probably the source of the most restrictive interpretations of the regulation. Extending their scope of action would reduce the predictability of the regulation and exacerbate the uncertainty under which EU banks operate.

Part of the problem of the simplification process in the EU is that the institution in charge of carrying it out (the European Commission) is a bureaucracy created to regulate and whose main purpose is to develop rules that ensure the level playing field in the single market. The Commission needs to run against its instincts in simplifying regulation.

Table 1. 10 reasons why Europe regulates so much.

1. Historical Experience with Crises
2. The European Model of Social Market Economy
3. Fragmented Political Landscape & the EU's Need for Harmonization
4. Precautionary Principle
5. Strong Public Support for Regulation
6. Influence of the European Parliament & Bureaucracy
7. Geopolitical and Economic Competitiveness Strategies
8. Legal Traditions Favoring Rules Over Market Solutions
9. Risk Aversion & Stability Prioritization
10. Digital & Financial Sector Oversight

Source: ChatGPT

6. THE OBJECTIVE(S) OF INDEPENDENT AGENCIES AND DEMOCRATIC ACCOUNTABILITY

The scope for simplification of regulation is closely related to the regulatory architecture, the role played by different stakeholders and the dividing line between regulation and supervision. The ideal scheme should be based on (i) high-level international standards, (ii) principles - based regulation (level 1) and (iii) more technical and detailed regulation and supervision in charge of independent agencies (level 2) with appropriate accountability.

Over recent years international standards have become increasingly detailed, but their enforcement is increasingly weaker, which suggests a certain inconsistency in the whole process. We should move towards less detailed standards and reinforce their application through peer reviews and similar exercises. To facilitate the operation of international banks, regulation should avoid extraterritoriality and rely more on equivalence and substituted compliance.[10]

Regarding the balance between level 1 and level 2 legislation, it is important to ensure that banking regulation is in accordance with legislators' objectives and at the same time based on sound technical analyses, which requires a clear mandate to the agencies and accountability on their part. This is more or less the UK model (reinforced after the 2023 reform) and was the US model before the Trump 2.0 Presidency, which has put into question the independence of the agencies.

Accountability is very limited in the EU, in particular in the supervisory field. The SSM has inherited the independence of the ECB, in what is probably an excessive interpretation of the Treaty. The rationale for the ECB independence is clear in the monetary policy domain, to avoid decisions based on short-term political objectives (for instance, a reduction in interest rates to stimulate growth and favor the reelection of an incumbent government) that may undermine the long-term objective of price stability (the so-called time inconsistency problem). But the rationale of extending this independence to the banking supervision field is not obvious.

This debate is related to the coexistence of multiple objectives in an independent institution. Accountability is easier with agencies that have a single objective. But over recent years the ECB has expanded its array of objectives to include, on top of price stability, banking supervision, payment systems efficiency or contributing to climate change objectives, to name a few. At the same time, other institutions have been created with narrow mandates (like the SRB in the area of resolution, AMLA in money laundering or the ESRB in macroprudential policies) that tend to overlap with that of the ECB.

To sum up, in Europe we have a weak government (as compared to Member States), a weak parliament (as compared to national parliaments), a strong bureaucracy tasked with developing regulation as its main purpose (the Commission), a very powerful in-

[10] See Fernández de Lis, S. (2017): Towards More Selective and Enforceable International Regulatory Standards, International Banker, December 11, 2017. https://internationalbanker.com/banking/towards-selective-enforceable-international-regulatory-standards/

dependent supervisor (the ECB/SSM) and a series of new regulatory agencies with narrow mandates and very limited accountability, focused on only partial objectives, without a broader picture. These new institutions tend to defend their territory by being more orthodox than the other agencies. It is not surprising that we overregulate, and it is certainly challenging to instill regulatory simplification in this architecture, a review of which should be a priority.

7. STRENGTHENING THE IMPACT ANALYSIS OF REGULATIONS

The EU carries out Impact Analysis (AI) of its regulation that scrutinizes legislative and non-legislative initiatives, delegated acts and implementing measures, with significant economic, environmental or social impacts. It was recently reviewed in the Better Regulation Communication of 2021. It comprises several steps: (i) problem definition and objective setting; (ii) identification of policy options; (iii) elaboration of an impact assessment report; and (iv) check by the Regulatory Scrutiny Board (RSB).

Impact Assessments must serve as honest evaluative mechanisms, identifying flaws and areas for improvement, to determine if a legislative proposal is the best policy option to achieve the intended objectives. The current process looks rather as a mechanism to confirm the appropriateness of the Commission's initiatives, as illustrated by the low and decreasing number of withdrawn or rejected Commission proposals. A negative IA should have the ability to halt proposals that have been deemed unnecessary.

The current static IA process, which focuses only on the pre-legislative stage, must be enhanced with dynamic IAs that incorporate systematic ex-post evaluations. This would ensure continuous monitoring and adjustment of policies based on real-world impacts and stakeholder feedback during the legislative process as well as after the legislation has been implemented. These should then lead to changes in the legislation themselves.

The IA process should prioritize competitiveness checks to ensure that new policies do not inadvertently harm economic growth or the competitiveness stance of EU companies. These checks must go beyond mere formalities and should be weighted significantly in the evaluation process and avoid "tick the box" exercises.

The current governance mechanisms, such as the Regulatory Scrutiny Board (RSB), need to be more effective. The absence of a significant number of final negative opinions from the RSB raises concerns about its ability to effectively evaluate the quality of IAs. Elevating the authority of the RSB by making its opinions binding would ensure higher quality and accountability in IAs before advancing the legislative proposals. Additionally, the composition of the RSB should include more external experts to objectively evaluate the IAs. Introducing stricter oversight measures and strengthening the RSB governance could improve the credibility and robustness of the IA process.

Other ideas that can be explored to improve the IA process are the following: broadening IA analyses to include factors like competitiveness, simplicity, cross-sectoral impacts, and broader economic implications, not just compliance costs; explaining more clearly IA methodologies, including assumptions, data used and calculations, to allow industry stakeholders to replicate and validate findings; include third-country impacts on the subsidiaries of EU companies, especially for industries like banking, where global competitiveness is critical; extend IAs to critical level 2 regulations and national transpositions, to ensure more clarity and predictability in implementation and less fragmentation; and improving industry data collection to ensure IAs are based on accurate, real-world inputs.

8. CONCLUSIONS AND SPECIFIC PROPOSALS

The European financial regulatory framework has grown increasingly complex, raising concerns about its impact on bank competitiveness. This note outlines a few proposals to streamline regulation, strengthen institutional accountability, and promote efficiency:

1. Clarify the scope of EU vs national competences.

- To avoid a rush to regulate when competences are unclear, it would be helpful to delineate more clearly ex ante the national vs EU competences, especially in the digital domain.

2. Embed Competitiveness into Regulatory Mandates.

- EBA and ESMA already include in their mandates the efficiency of the financial system, which is taken into account in their analyses of risks and vulnerabilities. There is no need to change these mandates, but perhaps reinforce the competitiveness/efficiency element in their impact analyses (see below)
- The SSM currently lacks a competitiveness goal and does not even consider it an implicit objective. A legislative "quick fix" could integrate efficiency/ competitiveness in the SSM mandate, mirroring the UK's 2023 reform.

3. Strengthen the SSM Accountability

The accountability of the SSM towards the European Parliament should be enhanced. The SSM should publish annual competitiveness or growth reports, detailing the impact of its policies on these objectives.

4. Create Better Avenues for Challenging SSM Decisions

- A senior-level dialogue between the industry and the SSM should help escalate technical issues that affect banks' competitiveness.
- The Administrative Board of Review (ABoR) should include independent experts, increase its transparency, and play a challenging role.

5. Reform the EBA Governance

- The EBA's board should include more independent members and less representation of national authorities. This would help making the consultation process of level 2 regulations more open.

- The European Commission should improve the oversight of EBA by assessing more systematically whether delegated acts stay within the legal mandates.

6. Enhance Impact Assessments

- Regulatory proposals should include evaluations focusing on economic and competitiveness impacts. Impact Assessments should be done also ex post (for instance 4-5 years after adoption), to ensure that the intended effects have been reached.
- The Regulatory Scrutiny Board of the Commission should include more independent experts.

7. Eliminate Redundant Authorities

- Every time an EU institution is created an analysis on whether the corresponding national authorities are still relevant should be carried out. The burden of proof should be on the need to maintain these national agencies.

8. Expand ESMA's Role

- In support of a deeper Savings and Investment Union (SIU), ESMA should supervise systemic market infrastructures and manage cross-border asset managers through harmonized oversight structures.

9. Simplify Capital Requirements

- Regulations like MREL should be simplified to reduce the compliance burden.
- The buffer structure of banks' capital requirements should be simplified, to avoid overlapping requirements decided by different authorities, with a special focus on the Systemic Risk Buffer, the Countercyclical Buffer and the Pillar 2 Buffers.
- EU banks should go further in the simplification of internal models, moving as a rule towards the standard model, as the US did a few years ago.

7. BASEL UNDER SIEGE. IS THE END IN SIGHT FOR GLOBAL COOPERATION ON FINANCIAL RULES?

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1. OVERVIEW

U.S. President Donald Trump has blown up global rules-based trade[1], ordered his country to exit the World Health Organisation[2], and flirted with pulling back from the International Monetary Fund[3], all since retaking office in 2025. He has – twice – withdrawn the U.S. from the U.N.-sponsored Paris Agreement, a binding international treaty to fight climate change, and in his first term he ended Washington's support for a 2015 nuclear deal with Iran.

Are international banking rules next? And if the U.S. pulls back from the next phase of the Basel capital standards, does this put paid to the idea of a level playing field for global financial institutions? Probably not. With this administration, nothing is certain, but the slow timeline and technical nature of international financial architecture are well suited to withstand political pressure. Financial stability is essential for every economic agenda. There is little upside to make banking riskier again.

Bank capital standard-setting is usually referred to the Basel process, after the city in Switzerland that houses the international bodies dedicated to global cooperation on these topics. The Basel Committee on Banking Supervision, founded in the 1970s, is the panel of finance ministers and central bankers that hammers out the global framework for how banks should assess risks and manage their ratio of assets to liabilities. The committee has a home base as part of the Bank for International Settlements, a collaboration center for monetary authorities that collects data and offers technical

[1] Barata de Rocha, M., Boivin N. and Poitiers N, "The economic impact of Trump's tariffs on Europe: an initial assessment", Bruegel analysis 17 Apr. 2025, available at https://www.bruegel.org/analysis/economic-impact-trumps-tariffs-europe-initial-assessment

[2] White House press release, 20 Jan 2025, available at https://www.whitehouse.gov/presidential-actions/2025/01/withdrawing-the-united-states-from-the-worldhealth-organization/

[3] Lynch, D., "Trump administration says IMF, World Bank 'falling short' of missions", Washington Post, 23 Apr. 2025, available at https://www.washingtonpost.com/business/2025/04/23/bessent-world-bank-imf-treasury/

advice. It also works alongside the Financial Stability Board, an independent panel set up by the G-20 to make sure the major financial centres will all be sitting around the same table whenever a crisis hits. All three bodies have a goal of coordinating so that neither "home" countries, where big banks are headquartered, nor "host" countries, where the banks do cross-border business, are subject to economy-flattening outflows when trouble strikes.

Bank capital itself does not move in lockstep with the agreed rules. In 2014, for example, the EU became the only major jurisdiction to be deemed non-compliant with the Basel process[4]. Furthermore, market forces often encourage banks to hold more than the minimum, regardless of jurisdiction. In November 2024, the U.S. Federal Reserve reported that "most banks" held capital well above regulatory requirements, and that 99% of banks were well capitalized[5]. The European Central Bank said that "on average", banks kept their capital and liquidity positions well above regulatory requirements in 2024.[6] The European Banking Authority notes that most banks keep a "management buffer" above regulatory levels, although this kind of reserve is often not clearly defined by the banks in question.[7]

In broad terms, EU and U.S. capital requirements for big banks are roughly equivalent, as noted by Bruegel researchers and by Claudia Buch, head of the ECB's Single Supervisory Mechanism.[8]

Nonetheless, European lenders have been arguing for the EU to move slowly on the next round of Basel rules because of fears that U.S. deregulation will somehow put them at a disadvantage, even as U.S. bankers call for regulators to ease off so they will not be outdone their European peers. In the same way that realtors often claim there has never been a better time to buy or sell your house, bankers can be counted on to make a case for lowering capital standards.

In 2025, the transatlantic hand-wringing is mostly about who will move first to adopt the latest round of global bank capital standards, currently dubbed the Basel endgame. The U.K. has decided to delay one major element of the new rules, the intimidatingly

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[4] Basel Committee press release, "Assessment of Basel capital regulations in the European Union concluded by the Basel Committee" 5 December 2014, available at https://www.bis.org/press/p141205.htm

[5] Federal Reserve Supervision and Regulation Report, November 2024, https://www.federalreserve.gov/publications/2024-november-supervision-and-regulation-report-banking-system-conditions.htm

[6] European Central Bank, ECB keeps capital requirements broadly steady for 2025, reflecting strong bank performance amid heightened geopolitical risks, 17 Dec. 2024, available at https://www.bankingsupervision.europa.eu/press/pr/date/2024/html/ssm.pr241217~8ca7d1d44e.en.html

[7] European Banking Authority, "Stacking orders and capital buffers: Reflections on management buffer practices in the EU," 15 july 2024, available at https://www.eba.europa.eu/sites/default/files/2024-07/3f548b65-873a-4f0d-ab5a-094cd18dee33/Report%20on%20stacking%20orders%20and%20capital%20buffers.pdf

[8] Mejino-López J. and N. Véron (2025) 'EU Banking Sector & Competitiveness', In-depth Analysis/Study, European Parliament, available at https://www.europarl.europa.eu/thinktank/en/document/ECTI_STU(2025)764188 and Buch, Claudia, 'Letter to MEP Mr Heinäluoma', available at https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.mepletter241028_Heinaluoma~25885c19ec.en.pdf

named Fundamental Review of the Trading Book, until 2027[9]. The EU, after already postponing this aspect of the new rules to 2026, is now considering further delays.[10] On the surface this sounds like it could be a daunting setback. But given that these rules were first proposed in 2013, the extra time is merely one more bend in a long, windy road. Because the new rules are so complex, getting them calibrated is more important than putting them in place on a strict schedule.

Europe may pose the bigger risk to financial stability if the new rules do not go through, because of differences in how the U.S. and the EU regulate their megabanks, the ones most likely to cause cross-border turmoil. We have been here before: in 2009, Posen and Véron predicted that a number of European banks would be insolvent and require state support[11], even as stress tests at the time predicted what would turn out to be implausible levels of resilience[12]. It was easier for supervisors to look the other way and to protect their national champions rather than face up to the losses ahead, as surfaced in the failures of Dexia, Fortis, Bankia, Anglo Irish and others.

The European Commission now acknowledges that the euro debt crisis wreaked havoc on banks across the monetary union, in part because capital requirements did not require strong enough buffers[13]. Europe has often sought to defend its policy by citing strong capitalisation in small and medium-sized banks, and by making the case that European lending models are less inherently risky. Yet these smaller banks are not the ones that face competitition from across the Atlantic, nor are they the ones judged globally significant.

The U.S., in contrast, has generally kept its standards higher[14]. Its banks are more likely to complain about "gold-plating", or going beyond the Basel requirements, than

[9] UK Prudential Regulation Authority, announcement of Basel 3 implementation delay, 17 Jan. 2025, available at https://www.bankofengland.co.uk/news/2025/january/the-pra-announces-a-delay-to-the-implementation-of-basel-3-1

[10] European Commission, announcement of consultation on market risk rules for banks, 25 March 2025, available at https://finance.ec.europa.eu/news/commission-launches-consultation-eu-approach-market-risk-rules-banks-2025-03-24_en

[11] Posen, A. and Véron. N, "A Solution For Europe's Banking Problem", European Parliament Study, June 2009, available at https://www.bruegel.org/policy-brief/solution-europes-banking-problem

[12] Committee of European Bank Supervisors, "CEBS's press release on the results of the eu-wide stress testing exercise," 1 Oct. 2009, available at https://www.eba.europa.eu/sites/default/files/documents/10180/15977/01df9de6-acc8-4b8f-ac72-849d96087795/CEBS-2009-180-Annex-2-%28Press-release-from-CEBS%29.pdf

[13] "The financial crisis has unveiled a number of shortcomings of Basel II and necessitated unprecedented levels of public support in order to restore confidence and stability in the financial system. In particulars the following drawbacks of the existing framework were identified: capital that was actually not loss-absorbing, failing liquidity management, inadequate group wide risk management and insufficient governance." European Commission memo on CRD IV/CRR, July 2013, available at https://ec.europa.eu/commission/presscorner/detail/en/memo_13_690

[14] See Berg, J., Boivin, N. and Geeroms H, "The quickly fading memory of why and when bank capital is important," available at https://www.bruegel.org/sites/default/files/2025-04/WP%2004%202025_1.pdf

current level.[15] To the extent that Trump does decide to ease off on American lenders, it may be to roll back Biden-era proposals that would go beyond the Basel standards.

That said, there are strong incentives for the U.S. to implement further reforms in some way: if the U.S. does not act at all, Europe might also pause its upgrades, to the detriment of euro-area welfare. Industry stakeholders[16] and some U.S. authorities, such as Fed Chairman Jerome Powell,[17] thus tend to favor a "capital-neutral" version of the U.S. proposal, that would keep the global system intact without much change to how American lenders operate.

The U.S. has no incentive to drop out of either the Basel system of international authorities or the bank oversight rules they produce. The Fed is a capital-contributing shareholder of the BIS, which is entirely run by central banks and which they use to conduct transations with each other. Meanwhile the Basel Committee and the FSB are not treaty-based organisations. They are committees that make recommendations. Participating countries have total control over how they adopt the international standards. Yes, the Fed did withdraw from the Network for Greening the Financial System[18], another panel of financial authorities, a few days before Trump took up his second term. But that group dates only to 2017, has direct ties to the Paris Agreement on climate, and focuses on issues at some remove from the core central bank issues of setting interest rates and overseeing bank safety. The Fed at least has a clear incentive to draw a line between political issues like how to combat global warming and its main operational lines, even if other central bankers choose to plan differently.

Financial policymaking tends to be insulated from broader political standoffs because it is so arcane and technical. This policy silo can be helpful when reaching some types of consensus, but damaging when it comes to pushing through policies like deposit insurance that require broader political signoff. This paper aims to demystify the international institutions and processes that set global banking standards, in hopes of breaking down those walls and including a wider range of voices in the discussion.

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[15] SIFMA, "The Federal Reserve Should Remove "Gold-Plating" in the Basel III Endgame," 8 Nov 2023, available at https://www.sifma.org/resources/news/blog/the-federal-reserve-should-remove-gold-plating-in-the-basel-3-endgame/

[16] SIFMA, "Our take on PWC's assessment of the Basel III endgame", 24 June 2024, available at https://www.sifma.org/resources/news/blog/our-take-on-pwcs-assessment-of-the-us-basel-iii-endgame-proposal/

[17] For example see comments by Federal Reserve Chairman Jerome Powell to the Senate Banking Committee, as reported in the ABA Banking Journal: When questioned whether the revised proposal would take a "neutral approach" to capital, Powell said "that is a good starting place." "I've said many times in this committee that I think that I think that the level of capital in the largest banks is about right, and it'll shake out somewhere in that area," he said. American Bankers Assocation, 11 Feb. 2025, available at https://bankingjournal.aba.com/2025/02/feds-powell-pressed-on-regulatory-gaps-amid-cfpb-hiatus/

[18] The Network of Central Banks and Supervisors for Greening the Financial System, as it is formally called, includes 160 members and observers. Even after the Fed's departure, as of mid-2025 the group still includes the U.S. Federal Housing Finance Administration and New York's Department of Financial Services. https://www.ngfs.net/en/about-us/membership

2. THE WORLD'S BANKING CLUBS

To understand why the U.S. participation in international bank standard-setting differs from its approach to other international institutions, it is worth revisiting which bodies matter and how they came to be.

Three institutions sit at the heart of global financial cooperation: the Bank for International Settlements and the two committees it hosts, the Basel Committee on Banking Supervision and the Financial Stability Board. All are housed in Basel, Switzerland, where these overlapping networks of information sharing, standard-setting and policy-making anchor the global banking architecture. But they each have their own separate membership and governance structure.

The BIS is wholly a project of central banks and monetary authorities. It has its own capital, its own staff and a broad global mandate to collect data, foster cooperation and offer technical assistance. The Basel Committee is group of central banks and also bank supervisors, from a smaller but still large set of countries. It produces consensus-based agreements that participants are supposed to implement over time. Finally the Financial Stability Board is a consensus-based group of authorities from the world's major financial centers that aims to monitor market developments, define best practices and coordinate crisis-fighting efforts. It reports regularly to the G-20 and does not make binding recommendations.

In the context of U.S.-EU cooperation, each has a valuable role to play. Yet one of the difficulties for outsiders is keeping these various bodies straight and remembering what they are for. Their evolution shows how a global financial system emerged through the testing grounds of two world wars, the Great Depression, and the rise and fall of the Bretton Woods currency system, expanding to include more and more countries along the way. Yet the Basel Committee and the FSB are not based on treaties and their recommendations are not strictly binding.

BANK FOR INTERNATIONAL SETTLEMENTS

BIS itself was founded in January, 1930, following a convention signed by Switzerland in cooperation with the governments of Belgium, France, Germany, Italy, Japan and the U.K., as a way to coordinate reparations set up after the first World War[19]. The bank was set up as an international organization and as a company owned by shareholding member banks. Its two assignments were to collect payments and to foster central bank cooperation. While that first mission was quickly overtaken (reparations payments were soon cancelled as the gold exchange standard collapsed during the Great Depression), the second task has proven its worth repeatedly over the subsequent nine decades.

By the end of 1931, membership had grown to 24 European central banks, with

[19] BIS history and timelines available on the bank's website, here: https://www.bis.org/about/history_1foundation.htm

Japan and the U.S. represented by private sector banking groups until the 1960s. There were a number of threats to its survival – for example, leading up to World War II the BIS attempted to remain neutral, but its decision to continue transactions with Germany's Reichsbank led the Washington to block U.S-held BIS assets until after World War II. In 1944, the Bretton Woods Conference voted to dissolve the BIS, but it hung on. Central bankers resumed meeting there in 1946, and in 1948 reached agreement on war reparations and on the BIS's continued existence.

BIS helped European countries settle trade balances during the 1950s, then took on a broader global coordination role during the Bretton Woods years. In the late 1960s, its shareholders began expanding beyond countries involved in German reparations, and in the 1990s it reached out to emerging-market central banks as well. It played a key role in helping EU banks coordinate their exchange rates in the runup to the euro.

As of 2024, 63 central banks and monetary authorities hold BIS capital and voting rights.[20] The BIS itself has more than 600 staff from more than 60 countries, with satellite offices in Mexico City and Hong Kong as well as a quartet of "innovation hubs" to help with financial infrastructure development. The institution divides its work into four broad categories: economic analysis, banking, technology and general internal coordination. It also serves as banker to its central bank members, helping with gold sales and other currency coordination moves, and hosts a range of committees and working groups.

From early on, the BIS began collecting financial and banking statistics while offering research and insights to its members and more broadly. These data have proven essential to understanding how cross-border banking crises work and how capital moves around the world.[21] BIS works with national central banks and data collection authorities to put together publicly available data sets on credit, global liquidity, derivatives, exchange rates and other financial information.

BASEL COMMITTEE

In the 1970s, this coordination role took shape in the form of the BIS Basel Committee for Banking Supervision, formed in response to a period of global banking and exchange-rate turmoil. It became evident that plumbing delays in settling international payment flows could be catastrophic, as shown by the failure of Germany's Bankhaus Herstatt, which speculated heavily in foreign exchange markets and proved unable to

[20] Bank for International Settlements 2023-2024 annual report, available at https://www.bis.org/about/areport/areport2024.pdf

[21] See for example this Federal Reserve Bank of New York study, which used BIS data to show that capital outflows from the late 1990s Asian financial crisis did not primarily flee to U.S. markets but instead were split roughly half and half between offshore center banks and banks with a nationality other than the U.S., a European country or Japan. Van Wincoop, E. and Kei-Mu Yi, "Asia Crisis Postmortem: Where Did the Money Go and Did the United States Benefit?", Federal Reserve Bank of New York Economic Policy Review, September 2000 Volume 6, Number 3, available at https://www.newyorkfed.org/research/epr/00v06n3/0009vanw.html

close its transactions[22]. This in turn caused a 24-hour shutdown of U.S. payment infrastructure and spilled over onto other financial institutions.

The 10 major central banks that founded the Basel committee, initially known as the Committee on Banking Regulations and Supervisory Practices, wanted to make sure no bank evaded supervision and to make sure home and host regulators worked together to prevent problems. This process began with a "Concordat" in 1975[23] on oversight of foreign branches and other cross-border operations, evolving in subsequent decades into various principles for cross-border banking.

As supervisory coordination became more established, emphasis grew on making sure banks had enough capital, leading to the series of agreements known broadly as the Basel standards. The committee itself has grown to 45 members, comprising central banks and bank supervisors from 28 jurisidictions. As a BIS committee, it has a secretariat at the headquarters, in Basel, and holds its meetings there.

FINANCIAL STABILITY BOARD

The Financial Stability Board is fully independent of BIS, even though its secretariat is hosted there. It is a more modern invention, growing not from the World Wars or the 1970s stagflation years but out of the turn-of-the-Millennium hot money era. The Group of Seven major economies started out in 1999 with the Financial Stability Forum, the brainchild of then-Bundesbank President Hans Tietmeyer. The idea was to augment existing international fora so that authorities could identify vulnerabilities earlier in the cycle, improve information exchange and coordinate best practices[24].

In 2009, amid the Global Financial Crisis, the G-7 upgraded the group into the Financial Stability Board, expanding its membership beyond the G-7 and including a wide range of financial authorities and international institutions within its auspices. The group now includes the G-20 group of major and developing nations, along with authorities from the financial centers of Hong Kong, Singapore, Spain and Switzerland. It also has regional groups that seek input from around 70 countries and jurisdictions.

The FSB's main goal is to make sure all the major players are sitting around the same table if and as a financial crisis arises. It explicitly has no treaty and makes no binding recommendations.[25] The group reports regularly to the G-20, which generally endorses its policy agenda, but because of its wider membership and specific focus it works inde-

[22] "More Than Thirty Years After The "Herstatt" Case, Foreign Exchange Settlement Risk Is Still An Issue," ECB Financial Stability Review December 2007, available at https://www.ecb.europa.eu/press/financial-stability-publications/fsr/focus/2007/pdf/ecb~ccda416def.fsrbox200712_19.pdf

[23] Initially confidential, the full text of this agreement is available on the BIS website, along with other archival agreements among participating central banks over the course of the Basel Committee's evolution.

[24] Andresen, Svein, "The Financial Stability Forum," CESifo Forum 4 / 2000, available at https://www.ifo.de/DocDL/Forum400-focus3.pdf

[25] Financial Stability Board, "The Work of the FSB", available at https://www.fsb.org/work-of-the-fsb/

pendently of the G-20 cycle, and it does set international standards and other policies that its members agree to implement.

3. THE BASEL CAPITAL-RULES JOURNEY

Basel capital standards are set out in various committee agreements that have been sorted into rounds. So far there have been three, with the industry already talking about the prospect of Basel IV as a way to frame what might come next.

BASEL I

The original "Basle Accord" was agreed in 1988, after the Latin American debt crisis led authorities to worry that international risks were growing while bank set-asides were declining[26]. The deal called for a minimum ratio capital to risk-weighted assets of 8% to be implemented by the end of 1992. Within a year, the Basel Committee issued a statement that G-10 country banks with cross-border operations were meeting the minimum requirements, and the framework was adopted by virtually all countries with active international banks.[27]

Over time, the framework evolved to include market risk and other kinds of risk as well as credit risk, the risk of default, which was at the center of the first iteration. In 1996, the Committee adopted an amendment that paved the way for banks to use value-at-risk models to internally gauge their exposure to market fluctuations. This process, designed in collaboration with securities regulators, covered trading in foreign exchange, bond trading, equities, commodities, options and other market segments.

BASEL II

In 1999, the committee started work on a new round of capital standards, agreed in 2004. This revised framework expanded the reach of the oversight framework and took shape in three pillars:

- minimum capital requirements
- supervisory review of capital adequacy and internal models
- the role of disclosure in encouraging market discipline and sound banking practices

These changes aimed to keep up with financial innovation and also acknowledge the role of investor confidence in encouraging firms to stay healthy. "Market discipline" happens when a firm loses money because investors are not happy with how it is manag-

[26] BIS, History of the Basel Committee, available at https://www.bis.org/bcbs/history.htm?m=84

[27] History of the Basel Commitee

ing. It is not something regulators impose, but it is something regulators can facilitate by making sure market actors have good information.

Basel II made more use of internal risk models, which led U.S. authorities to decide it should only be available, if at all, to larger and more sophisticated banks. Smaller banks were expected to stick with Basel I and the simpler 8% capital floor. Larger banks in theory could use the models, but as of 2011 had still not received the individual approvals necessary to move to the more sophisticated system[28].

This may have been a good thing. When unveiling capital rules updates in 2013, the European Commission said it had identified drawbacks in the Basel II framework including “capital that was actually not loss-absorbing, failing liquidity management, inadequate group wide risk management and insufficient governance.” [29]

Some of this may be due to Europe’s implementation of the Basel II rules rather than the framework itself. An IMF point-counterpoint published in June 2008 captured the debate succinctly. Jésus Saurina, then the financial stability director for the Bank of Spain, hailed the new rules as matching capital rules more closely to the actual risk banks were taking on and accepted “a certain degree of procyclicality as inevitable.” Avinash Persaud, chairman of Intelligence Capital Limited, argued that so-called risk sensitity models could turn price declines into systemic collapse, in a contribution titled “Sending the Herd Over the Cliff. Again.”[30]

BASEL 2.5

Some of the Basel II changes indeed did not work out as planned. In the words of the Basel Committee, itself: “Significant weaknesses in the Basel capital framework for trading activities resulted in materially undercapitalised trading book exposures prior to the 2007–08 period of the financial crisis.”[31]

Starting in 2009, the Basel Committee began rolling out a package of updates known as Basel 2.5, aimed at refining the value-at-risk modeling. The updates, refined over the course of about two years, tried to get banks to consider how their portfolios would react to market volatility as well as in calm conditions. Main changes in this round included more stress testing when calculating risk exposures, higher capital charges for

[28] Dugan, J. and J. Xi, “US: Implementation Of Basel Ii: Final Rules Issued, But No Supervisory Approvals To Date,” report to the European Parliament’s Committee on Economic and Monetary Affairs, October 2011. https://www.europarl.europa.eu/document/activities/cont/201110/20111012ATT29102/20111012ATT29102EN.pdf

[29] European Commission, “Capital Requirements - CRD IV/CRR – Frequently Asked Questions”, 16 July 2013, available at: https://ec.europa.eu/commission/presscorner/detail/en/memo_13_690

[30] Saurina, J., “Banking on the Right Path,” and Persaud, A., “Sending the Herd Over the Cliff. Again.”

Both part of IMF Finance and Development, June 2008, available at: https://www.imf.org/external/pubs/ft/fandd/2008/06/pdf/saurina.pdf

[31] Basel Committee on Banking Supervision, “Explanatory Note on the Revised Minimum Capital Requirements for Market Risk,” January 2016, https://www.bis.org/bcbs/publ/d352_note.pdf

unsecuritised credit products, and more regulatory oversight of capital charges on securitisations.[32] The rules sought to prevent banks from moving troubled assets from their "banking book", of assets they were holding, to their "trading book" of assets available for sale, and thus avoiding safeguards intended to ensure their overall health.[33]

BASEL III

After the Global Financial Crisis, which saw banks and other financial institutions topple like dominoes, policymakers sought to crack down on risk-management loopholes. In 2010, global bank supervisors agreed on the outline of reforms to the capital and liquidity management system, as well as higher capital standards for commercial banks.[34] This stage of Basel is sometimes referred to as Basel 3.1, Basel IV or just the Basel "endgame", as well as by the broad Basel III umbrella.

The goal of this set of changes is broadly for banks to hold more capital, and for that capital to be better quality. While subject to criticism on all sides[35], it represented a big step forward and introduced concepts such as the Net Stable Funding Ratio, the Liquidity Coverage Ratio and the Countercyclical Capital Buffer, to make sure banks could stay solvent during times when liquidity might be hard to come by. It absorbed longstanding disagreements between the U.S. and the EU over how to calculate bank leverage, resulting in a mutually defined leverage ratio that would become part of the new standards. It also includes an "output floor," a much debated effort to set a minimum level of capital that banks need to have on hand regardless of how their internal models assess risk.

The idea was that most of the Basel III changes would be phased in between 2013 and 2019[36]. Over time, the committee elongated its timeline and sought to adapt the new rules to changing conditions. Some of the supervisory changes took longer to implement than the numerical targets for various capital ratios, and the planning horizon extends to at least 2028[37]. As of 2025, the EU has put many of its provisions into effect but as mentioned earlier it is still holding off on when to implement the new rules on market risk, which the U.S. and UK also are delaying.

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[32] Basel Committee on Banking Supervision, "Revisions to the Basel II market risk framework", available at https://www.bis.org/publ/bcbs193.pdf

[33] See Jan. 2016, available at https://www.bis.org/bcbs/publ/d352_note.pdf

[34] BIS, History of the Basel Committee

[35] Véron, N., "Basel III: Europe's interest is to comply", 18 Feb. 2013, available at https://www.bruegel.org/blog-post/basel-iii-europes-interest-comply

[36] Basel Committee on Bank Supervision, "Basel III: A global regulatory framework for more resilient banks and banking systems", available at https://www.bis.org/publ/bcbs189.pdf

[37] Basel Committee on Banking Supervison, "Basel III transitional arrangements, 2017-2028", available at https://www.bis.org/bcbs/basel3/b3_trans_arr_1728.pdf

The EU has said it may not finish phasing in some requirements until 2032, see https://finance.ec.europa.eu/news/latest-updates-banking-package-2023-12-14_en

4. COMPETITIVENESS IN CONTEXT

When it comes to banking, disputes over international deadlines often obscure bigger questions of how banks are managing and if they have the right conditions to support the broader economy. The process is exceptionally complicated: each jurisdiction has its own definitions for how to measure bank capital, how to assign risk weights, and how to model the effects of market dynamics. Real estate lending is especially contentious, given its importance to bank business models and its prominence in various banking crises over the years, as is lending to small and medium-sized enterprises.

The goal of these rules and agreements is to keep the financial system stable. Plumbing problems, more than market moves, do the worst damage to global economies because they disrupt the operations of the global economy via financial contagion[38]. It is hard to distinguish winners and losers when the whole game board is overturned. The U.S. has dragged its feet when it comes to adopting the various rounds of Basel rules, but it acted quickly to shore up its financial system when the Global Financial Crisis struck. Europe, in contrast, has had periods of moving ahead with the Basel standards while dragging its feet on solving its own sovereign debt struggles. European banks have been some of the worst offenders in undercaptitalising overseas subsidiaries.[39] Overall, Europe's choice of carveouts from the Basel framework led to particular censure from the committee itself.

In reviewing the iterations of Basel and their interpretations by various jurisdictions, it is worth noting that the EU's IRB approach has deemed "materially non-compliant" by the Basel Committee itself, a formal criticism not leveled at other jurisdictions[40]. This is an embedded feature of the EU system. The U.S.'s brushes with Basel non-compliance have so far been more temporarty: in April 2020, in response to the pandemic, the Fed suspended its so-called supplementary leverage ratio and fell out of step with the Basel rules[41], but this move was reversed on March 31, 2021, when the temporary pause was lifted.

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[38] Lehman Brothers is one of the best known examples of how financial contagion spreads after a sudden shock to an extent not explained by direct linkages. See Wiggins, Rosalind Z. and Metrick, Andrew (2019) "The Lehman Brothers Bankruptcy H: The Global Contagion," Journal of Financial Crises: Vol. 1 : Iss. 1, 172-199. Available at: https://elischolar.library.yale.edu/journal-of-financial-crises/vol1/iss1/9

[39] Barclays and Deutsche Bank both closed their U.S. holding companies after the Federal Reserve moved to increase capital requirements on foreign-owned subsidiaries; Deutsche Bank's U.S. operations were reported to hold negative capital due to highly leveraged operations. See Braithwaite, T. and S. Nasiripour, "Deutsche Bank avoids U.S. capital rules", https://www.ft.com/content/f2d96462-738e-11e1-94ba-00144feab49a

[40] Basel Committee on Banking Supervision, "Assessment of Basel capital regulations in the European Union concluded by the Basel Committee," 5 Dec. 2014, available at https://www.bis.org/press/p141205.htm

[41] Véron, N., "Is the U.S. reneging on international financial standards?", Bruegel, 16 April 2020, available at https://www.bruegel.org/blog-post/united-states-reneging-international-financial-standards and Federal Reserve announcement, 19 March 2021, available at https://www.federalreserve.gov/newsevents/pressreleases/bcreg20210319a.htm

One of the challenges in pitting Basel compliance regimes against each other is that each jurisdiction has its own capital "stack" based on local implemeting rules. Transparency also varies: U.S. banks are required to file generally comparable quarterly call reports, while European banks face a wider range of disclosure requirements that can be less demanding, particularly for unlisted banks.

Here is one illustration of how that looks in practice[42]: the Basel III framework sets the minimum requirements for the CET1 (common equity tier 1) risk-based capital ratio at 4.5 percent with, on top of that, a so-called capital conservation buffer at 2.5 percent, plus a countercyclical buffer under macro-prudential policy and an additional buffer for G-SIBs (BIS, 2025). In addition, the Basel framework foresees requirements from supervisory discretion, to cover additional risks not covered by the first pillar. Basel III also sets the minimum leverage ratio at 3 percent, with an added leverage buffer for globally systemic banks. In Basel parlance, minimum requirements are known as "pillar one" standards, while those that regulators control are known as "pillar two".

The EU has adopted from Basel III the minimum CET1 requirement at 4.5 percent, the capital conservation buffer at 2.5 percent, additional buffers for systemic firms, and countercyclical buffer on a country-by-country basis, plus a "systemic risk buffer" covering any other systemic risks. Its discretionary barriers are split into binding and non-binding national guidance, with the ECB having at least theoretical powers to intervene.[43] Leverage ratios face a similar set of requirements and decision-making distribution.

US banks generally are required to hold a minimum CET1 ratio of 4.5 percent, Tier 1 at 6 percent, and total capital (Tier 1 and Tier 2) at 8 percent, plus capital conservation buffer at 2.5 percent. For large banks, the framework adds a "stress capital buffer" based on supervisory stress test results, plus a capital surcharge for G-SIBs which is typically larger than that recommended.[44] The Federal Reserve also has an option to apply a countercyclical buffer but has never used that option to date.

5. BUT HOW ARE THE BANKS DOING?

In the international debate over bank oversight, it is a time-honored tradition for stakeholders seeking loopholes to hone in on how somebody else's deviations are even bigger. The EU has long been frustrated with Washington's tendency to ignore the Basel process when it suited, while the U.S. has resented European banks for receiving

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[42] Mejino-López J. and N. Véron (2025) 'EU Banking Sector & Competitiveness', *In-depth Analysis/Study*, European Parliament, available at https://www.europarl.europa.eu/thinktank/en/document/ECTI_STU(2025)764188

[43] Ibid.

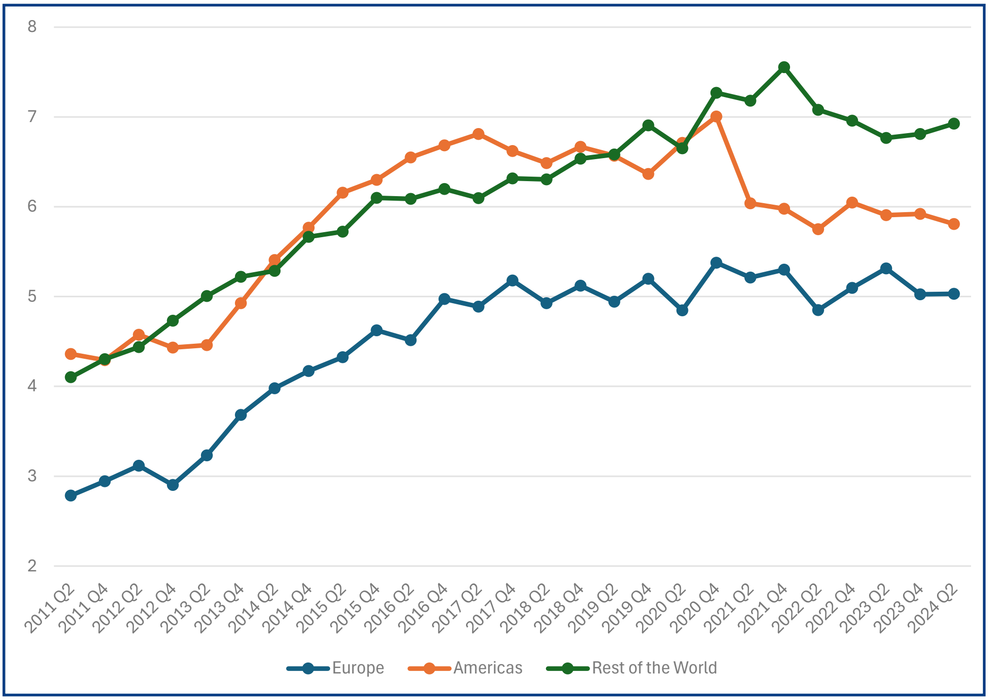
[44] Feierstein, B. and C. Donohue (2022) 'Calculating the Regulatory Surcharge for US G-SIBs', GARP White Paper, available at https://www.garp.org/hubfs/Whitepapers/a2r5d000004TgupAAC_RiskIntell.GBI.Whitepaper.GSIBs.8.4.22.pdf

more carveouts and possibly complying with the numerical requirements but not the spirit of sufficient high-quality capital.

Amid the push to bring in new rules and create a more level playing field, Europeans tend to warn that the U.S. could kick off a race to the bottom by watering down its Basel-related proposals, while the U.S. blasts Europe for using bespoke statistics to make its banks look safer than they really are. The Basel Committee's recent compliance reports bear out this dichotomy.

For example, BCBS (2025) found that leverage ratios – a bank's total capital divided by total assets – for large internationally active banks are lower in Europe (5.0 percent) than in the Americas (5.8 percent) and the rest of the world (6.9 percent)[45]. A higher leverage ratio reflects a bank that holds more capital compared to the risks it takes on, and the Basel III process sets a floor for this metric[46].

Figure 1. Leverage ratio[47]



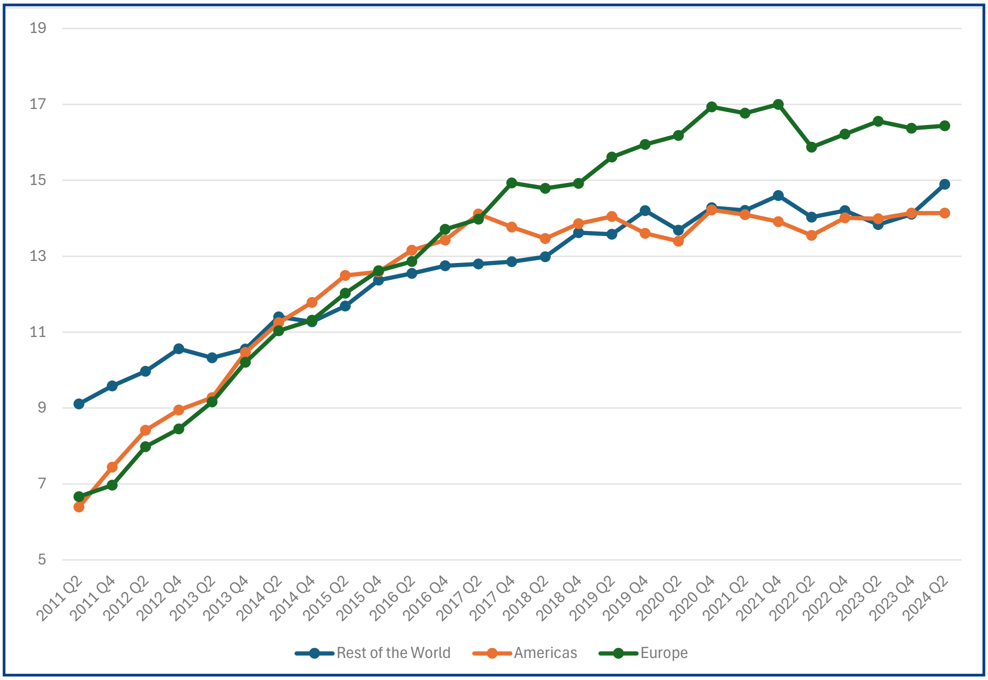
[45] Basel Committee on Banking Supervision, 2025 Basel III Monitoring Report, available at https://www.bis.org/bcbs/publ/d592.htm

[46] BIS, definition of the leverage ratio, https://www.bis.org/fsi/fsisummaries/b3_lrf.pdf

[47] Figures 1 and 2 prepared by Nicolas Boivin for Bruegel. Source: Bruegel based on Basel Committe on Banking Supervision, Highlights of the Basel III monitoring exercise as of 26 March 2025. (The 'Americas' includes 13 US banks, six from Canada, two from Bazil and two from Mexico.) Reference: BCBS (2025) Basel III Monitoring Report, Basel Committee on Banking Supervision, Bank for International Settlements, available at https://www.bis.org/bcbs/publ/d592.htm

But when looking at the official ratio of top-tier capital to risks, the positioning reverses, and the European banks have higher levels of capital than their American and rest-of-the-world peers. This reflects the EU system's greater use of internal models that allow banks to declare certain assets less risky than their default weightings.

Figure 2. Tier 1 capital



The Basel Committee on Banking Supervision (BCBS, 2024) concluded that implementing the Basel III rules as agreed would raise capital requirements for EU banks more than for US banks, specifically by overriding the EU's prior leniency on allowing internal rating-based (IRB) models[48].

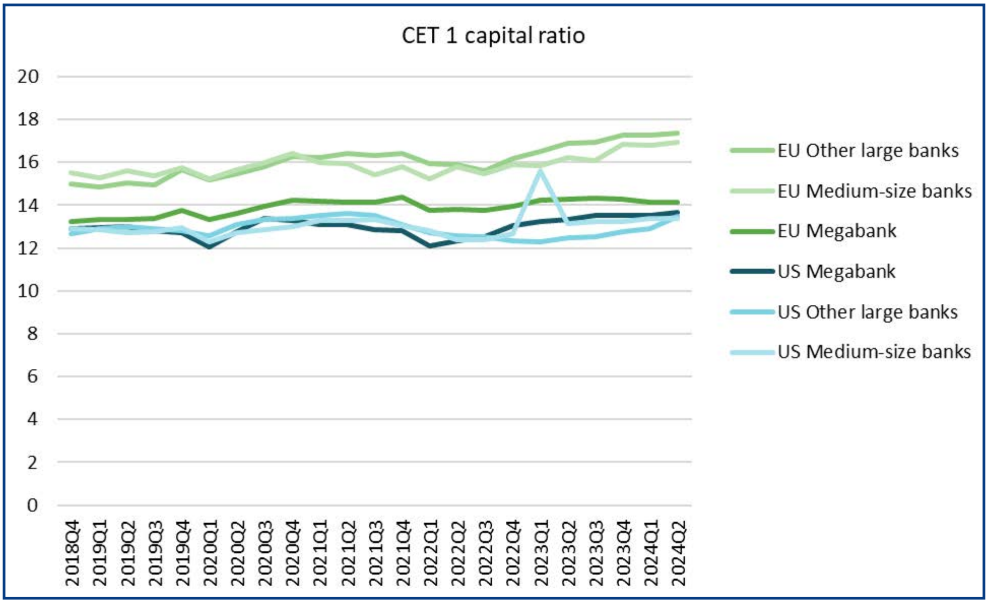
The implication here is that the European banks hold a current competitive advantage of allowing lower capital levels, not that the U.S. is at risk of undercutting a level playing field.

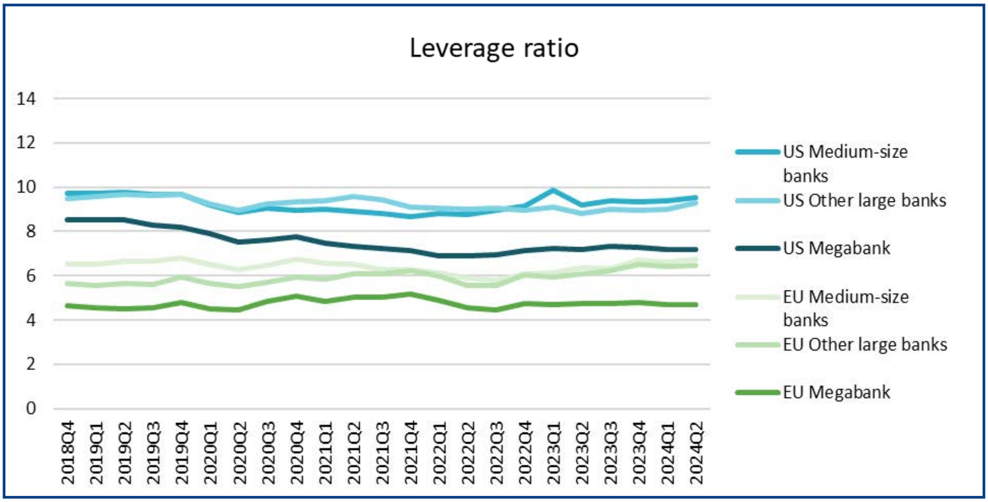
Mejino-López and Véron (2025) look at capital levels for banks of different sizes, and conclude that U.S. banks are better capitalized across the board when it comes to leverage ratios. For megabanks (defined as holding more than 1 trillion euros or dollars in assets), U.S. firms' leverage ratio is about 2 percentage points, or 40%, higher than

[48] Basel Committee on Banking Supervision, 2024 Basel III Monitoring Report, available at https://www.bis.org/bcbs/publ/d570.htm

the EU peers. The picture changes when considering CET1 ratios, although for mega-banks the difference is quite small.

Figure 3: Observed CET1 and leverage ratios for EU and US banks, 2018-2024.[49]





[49] Figure 3 prepared by Juan Mejino-López. Source: Calculations based on data from the EBA and Federal Reserve, Mejino-López J. and N. Véron (2025) 'EU Banking Sector & Competitiveness', *In-depth Analysis/Study*, European Parliament, available at https://www.europarl.europa.eu/thinktank/en/document/ECTI_STU(2025)764188

6. CLOSING THOUGHTS

Decades of work on the Basel institutions show that their work is measured in years, not months. Even if the U.S. fails to make any progress on its next round of banking legislation, that is not the same as dropping out of the international process. Likewise, while Trump and his senior officials are threatening to skip the G-20's next leaders' summit in South Africa, this is unlikely to be a permanent fracturing of the big countries' financial coordination. Trump has shown no sign of, say, urging the Fed to sell its stake in the BIS, and markets punished him for April rumblings that he might seek to undermine the central bank's independence by ending Powell's term early. One could expect that skipping out of bank safety standards completely would be catastrophic for the dollar and trigger the kind of credibility crisis that threatens Trump's whole agenda.

Instead, deregulation of the U.S. financial sector has focused on reducing customer protections and fraud enforcement. Examples of this include his efforts to close the Consumer Financial Protection Board and to close down a Justice Department team that investigated cryptocurrency fraud[50]. These moves will have a significant impact on the quality of service available to the American economy, but probably will not threaten global financial solvency.

Meanwhile, U.S. banks have an incentive to lobby for Congress to move ahead with some version of Basel endgame legislation. After all, U.S. banks would like their Europeaen counterparts to be forced to hold more capital. If there is an unlevel playing field, for the moment it favours the EU, and U.S. gridlock would give Brussels more incentive to delay.

Trump's approach towards deregulation has raised concerns that it could pull back at the same time Europe is stepping up. Yet news reports suggest the ECB itself has found that its banks would need to dramatically increase capital holdings if they were subject to the same standards as big U.S. lenders[51], and in any case a shakier U.S. financial system argues for EU banks to be more prudent, not less. If U.S. banks were somehow to face dramatically lower capital requirements, European authorities would have extra incentive to ask banks to meet higher capital thresholds because the global financial system would become riskier, raising the need for extra buffers. Given that banks have historically provided more than two-thirds of the EU's corporate financing, a wave of failures would quickly spill over into the broader economy.

European regulators should therefore do their best to stand strong and push ahead with the new rules. Either way, EU banks will be better off with more capital: either the EU will be a stronger participant in a rules-based system of global financial standards, or the EU will need all the reserves it can muster as that system wavers.

While the banks might grumble, the industry still prefers predictable rules over un-

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[50] The Guardian, "Trump's justice department to disband unit investigating crypto fraud", 8 Apr 2025, available at https://www.theguardian.com/us-news/2025/apr/08/trump-crypto-doj

[51] Arnold, Martin, "ECB split over report showing big EU banks' capital requorements lower than US rivals", 18 Nov. 2024. Available at https://www.ft.com/content/48f84e00-836d-4659-9d78-60ababfa83ed

certainty, and big banks benefit when fragmentation decreases. The euro area so far has triumphed by bringing 20 countries together under a single monetary policy and a single bank supervisor for systemic banks. For the EU to keep up with the U.S. – still the largest and most integrated capital market in the world – regulators cannot afford to back down.

8. DO WE REALLY NEED THE DIGITAL EURO: A SOLUTION TO WHAT PROBLEM EXACTLY?

Fernando Navarrete
European Parliament

1. WHY ARE WE DISCUSSING SOMETHING CITIZENS ARE NOT ASKING FOR?

The international geopolitical order is in crisis, and so too is the monetary and financial order. Profound financial crises tend to generate far-reaching social, economic, and political consequences. Moreover, this crisis is not merely conjectural or temporary; it is deep and structural. One of its clearest expressions is the rise of alternative visions of money, as well as of trust in financial interactions and in financial institutions. Such a development should come as no surprise. The erosion of confidence has created fertile ground for these alternative narratives. Although some may present themselves as innovative, they are rooted in older ideas. Certain crypto-related visions, for example, attempt to reintroduce features of the "wildcat" banking era, now sustained by a technological superstructure that disguises winners and losers and lures people lost in disbelief. What we are witnessing, then, is not merely a technological phenomenon. It reflects a broader societal reassessment of trust in traditional financial actors, both public and private.

This is the broader context in which the first consideration of a Central Bank Digital Currency (CBDC) emerged in the central bank community at the end of the last decade[1]. New technology adoption was seen as a mean to regain public trust. The bottom line of the strategy seemed to be that if the challenger's vision is techno-driven, let us do the same to keep people's trust. If it were that simple… Contrary to this interpreta-

[1] Bank for International Settlements, Annual Economic Report 2018: Chapter V – Cryptocurrencies: Looking Beyond the Hype (Basel: BIS, 2018), 91-109.https://www.bis.org/publ/arpdf/ar2018e5.pdf

tion, in my opinion, the root cause that made more people susceptible to alternative narratives about money and finance was their negative assessment of the outcomes by the traditional monetary and financial order in terms of stability after the Great Financial Crisis. If this is the case, a better-founded strategy should focus on providing better policy outcomes within the framework of fiat money and the traditional financial order. We are not confronting only a technological problem; it is fundamentally a political one. Technology may play a supportive role, but it is just a mean, and more likely than not, not the critical one. Institutional improvements and better outcomes should clearly be part of a balanced, coherent, comprehensive and successful response. From this general framework, it is worth noting that the existing Digital Euro proposal[2] is just one specific element of a broader set of policy responses that together are supposed to make the financial system fit for purpose for the digital age and restore citizens' trust by virtue of delivering better results.

The aim of this paper is to carefully assess the necessity, proportionality, and strategic coherence of the Digital Euro project within this broader framework.To do so,, the method will be to dissect, with all its pros and cons, the estimated contribution of its potential issuance on a wide range of specific sub-problems it is intended to address. It will also explore potential alternative policy options for each of these specific problems. This methodological approach is relevant because the alternative to a Digital Euro proposal is not the *status quo* (doing nothing), it should be the best alternative solution we can conceive for each identified problem. This is the test any policy proposal should pass before being adopted, and so will this paper try to do. For economists, this is the opportunity-cost concept. For others, just not prejudging the result by arbitrarily lowering the test bar[3].

This paper is my personal contribution toward helping establish a rational common ground to assess the proposal, taking into account the current geopolitical context that differs significantly from the one in which the Commission's initiative was originally formulated. Systemic skepticism about the proposal is the only way to achieve a fair assessment. Of course, as rapporteur for the European Parliament for the *Single Currency Package*[4], I have to take position on the different debates presented here but it is my intention to keep all, but the last section, as free as possible of a predetermined posi-

[2] European Commission. Proposal for a Regulation of the European Parliament and of the Council on the Establishment of the Digital Euro. COM(2023) 369 final, July 28, 2023. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023PC0369.

[3] As rapporteur for the European Parliament for the Single Currency Package (which entails both legal tender of euro banknotes and coins and digital euro proposal), my initial engagement with the dossier was through the European Commission impact assessment (European Commission, Commission Staff Working Document: Impact Assessment Report Accompanying the Documents Proposal for a Regulation on the Establishment of the Digital Euro, SWD(2023) 233 final, July 28, 2023, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023SC0233.), which, in my view, neither set the adequate test bar nor follow adequate methodological foundations.

[4] European Commission, Single Currency Package (Brussels, July 28, 2023). https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3836.

tion. Judgemental statements are inevitable but will be explicitly marked as such and the final section will outline what I consider to be a better way forward for the future of the European digital payments ecosystem based on interoperable, private-led, and commercial bank money-based innovative solutions underpinned by resilient central bank-led infrastructures and standards.

Section 2 will cover some basic concepts and fundamental risks around CBDCs. Section 3 benchmarks the Digital Euro against the best policy alternatives available for each the problems it is intended to solve. In section 4 some specific risks and vulnerabilities associated to the current Digital Euro proposal are assessed. Section 5 covers what the rest of the world is doing regarding CBDCs; and finally in section 6 I put together a proposal for an optimal response for Europe in the area of payments in the digital age.

2. WHAT IS REALLY A CBDC? INHERENT CHARACTERISTICS AND RISKS OF THE DIFFERENT TYPES OF MONEYS.

2.1. RETAIL VS. WHOLESALE CBDCS: A CRUCIAL DISTINCTION.

In the world of central bank digital currencies, a fundamental distinction should be made between wholesale and retail ones. The former are intended to increase the efficiency of wholesale payments between financial intermediaries also facilitating instant settlement via the central bank balance sheet. Improvements in this domain are deemed essential to increase the efficiency of the international financial system to deal with international transactions or to potentially reduce the settlement risks associated to the "cash leg" of securities' trading in the capital markets. So far, I have not found any reasonable argument that should prevent any central bank, and specifically the European Central Bank (ECB), to press ahead with the exploration of wholesale CBDC initiatives. These endeavours should be done in a cooperative manner with other central banks to ensure the different solutions are interoperable globally so that the promise of seamless international payments is fulfilled.

Wholesale CBDCs have the potential to transform many aspects of people's economic life: remittances by migrants or to students abroad, business to business (B2B) transactions related to international trade, securities post-trading efficiency, among others. Moreover, a potential bonus is to strengthen financial collaboration worldwide preventing the risk of financial fragmentation that could worsen the global economy in conjunction with current trade and geo-political tensions. In sum, no inherent risks are associated with them, the upside is clear and there is no need for complex institutional or legal shake-up as their development falls naturally within the traditional remit of central banks to provide back end payment infrastructures.

But the proposed Digital Euro is a different animal. It is a retail CBDC project. The current Commission proposal for a Digital Euro stems from the ECB technical work that officially started in 2020[5]. In brief, the Digital Euro proposal establishes a new form of digital money issued by the ECB that represents a direct liability to its balance sheet (like cash) accessible directly by citizens via digital wallets provided by Payment Service Providers (PSP).

Before considering the potential introduction of a digital euro, cash was the only central bank liability accessible by citizens on a daily basis. The inherent physical inconvenience of cash in terms of bulkiness, transportation costs, safety and the lack of explicit yield, left the brunt of the store of value function of money to so called "commercial bank money" in the form of bank accounts deposited in mostly private commercial banks. In addition, the modern digital nature of these bank accounts also made them the backbone of citizens' digital payments (mobilised through various means of payment like credit cards, direct debits and others) at the point of sale (physical store), for on-line payments (like in e-commerce) or for remote peer to peer transactions. The modern development of the financial system is rooted into this functional division between the different types of money. It determines the stable deposit base (particularly in times of no financial stress) that commercial banks could tap and rely for their corresponding credit activity and liquidity risk management.

2.2. EXPLAINING THE INTRINSIC FINANCIAL INSTABILITY RISKS ASSOCIATED TO RETAIL CBDCS AND CONCERNS ABOUT CITIZENS' PRIVACY

The intended design characteristics of the Digital Euro are such to maximize its convenience as a means of payment for electronic transactions while, at the same time, trying to limit its usage as store of value. In order to attain this difficult and unnatural equilibrium it is proposed to yield no interest (like cash) and, crucially, holding limits are to be established for each natural person holding it (i.e. how many Digital euros each natural person can hold at any time). These are considered key safeguards for maintaining financial stability as the inherent characteristics of any unrestricted retail CBDC makes it also a good means to store of value given, on the one hand, its unique risk profile (central bank direct liability) and, on the other, its convenience to mobilize thanks to its digital nature. Crucially, this is exacerbated in times of financial stress. This is the crux of the matter: retail CBDCs are inherently destabilizing for the current banking ecosystem based on a wide stable deposit base, underpinning long term lending by banks. If the deposit base is eroded (either structurally or in times of financial stress), so will be the capacity of banks to lend, especially long-term credit to individuals and corporations. These effects would be especially pronounced in Member States with less liquid, less well-capitalized or less diversified banking sectors, thereby exacerbating financial fragmentation and uneven resilience across the euro area.

[5] European Central Bank, Report on a Digital Euro (Frankfurt am Main: ECB, October 2020), https://www.ecb.europa.eu/pub/pdf/other/Report_on_a_digital_euro~4d7268b458.en.pdf.

To prevent this dangerous characteristic, the current Digital Euro proposal imposes untested, unproven and somewhat arbitrary exogenous limitations in the form of how many digital euros any citizen can hold at any point in time. How well these limits will fare in times of financial stress is a key question nobody has an answer to, because humanity has never been here before and this will be a regime change for which no past data are really meaningful. And this is not just a technical question on how to calibrate the holding limit; it is essentially a political question: will these holding limits be in place precisely when, in times of crisis, they might be binding for a large portion of the population seeking for a safe refuge for their savings? The most honest answer on my part is, I do not know for certain, but we should be prepared for the worst. In a crisis, public and political pressure could mount to increase the limits, weakening the safeguards, precisely when they are needed the most.

Once the Digital Euro is issued, it becomes harder to politically resist adjustments that would make it more attractive —and more destabilizing- in times of financial stress. This could also be no good for the political and institutional fabric of the EU: this politicization of monetary instruments creates new risks to central bank independence. Is the ECB ready, capable and even politically legitimized to fare that pressure, precisely in times of financial stress? Regardless of the result of this potential institutional clash, it will do no good to the long-term sustainability of ECB independence, which is essential to keep price and economic stability.

For some pundits of CBDCs the inherent destabilizing potential of retail CBDC is why they favour them. They envisage a new financial order with none or very limited bank deposits as most of the citizens' liquidity will be held directly at the central bank, with credit being mostly intermediated by non-bank (fund-type) financial intermediaries.[6] This paper is not the place to analyse the theoretical merits and demerits of this "alternative world" for finance in the proposed steady state as Nobel laureates Douglas Diamond and Philip H. Dybvig already did so[7]. What no one of their proponents has ever made explicit, are the economic and societal costs associated to the "mother of all financial crisis" they are trying to engineer to make room for a "new beginning" [8]. I am personally not eager to be part of the transitional generation and I presume that is very much the case for the vast majority of EU citizens.

In any event, it is worth noting that the Digital Euro as currently proposed is supposed not to serve this cathartic function as it includes explicitly the existence of individual holding limits as key financial stability safeguards. But the question remains whether these measures will be enough to fully suppress its inherent destabilizing na-

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[6] Miguel Ángel Fernández Ordóñez, El futuro de la banca: Dinero seguro y desregulación del sistema financiero (Madrid: Fundación Ramón Areces, 2018), 1–2.

[7] Douglas W. Diamond and Philip H. Dybvig, "Bank Runs, Deposit Insurance, and Liquidity," Journal of Political Economy 91, no. 3 (1983): 401–419, https://doi.org/10.1086/261155. Diamond, Douglas W. 2022. "Financial Intermediation and Financial Crises." Nobel Prize Lecture, Stockholm University, December 8, 2022. https://www.nobelprize.org/prizes/economic-sciences/2022/diamond/lecture/

[8] Garicano, Luis. 2024. "Do We Need Banks? The Digital Euro's Bizarre Design." Silicon Continent, November 27, 2024. https://www.siliconcontinent.com/p/do-we-need-banks

ture, particularly in times of financial stress (not necessarily linked to the existence of the Digital Euro itself). Unintended consequences are sometimes the only thing that is left of well-intended policies.

The other consubstantial problem with retail CBDCs is their reduced privacy compared to cash. This characteristic is shared by almost all digital payment methods. But crucially for some citizens, in the case of CBDCs, users do not voluntarily choose which provider to trust, it is necessarily the public authorities. Public consultations consistently demonstrate that privacy is the foremost concern among EU citizens when considering a digital currency[9]. Many people fear that the ECB or public authorities in general could monitor transactions, even indirectly, undermining individual autonomy or an erosion of civil liberties. Cash provides a level of non-traceability and anonymity that a centrally managed ledger cannot match —even with pseudo-anonymization techniques. Every digital transaction leaves a metadata trail that, if accessed by authorities (let alone malicious actors), could reveal sensitive information about individuals' habits, associations, and beliefs. The mere perception of surveillance can erode trust in the monetary system, undermining voluntary adoption and potentially driving privacy- sensitive consumers back to informal or unregulated payment channels.

Of course, this trait can be modulated depending on the specific design and technical solutions underpinning the Digital Euro. But ignoring or disregarding this issue as purely technical would be a fatal mistake. Remember that the broader issue at stake is that of public trust in the monetary and financial order. If concerns for their privacy fuel distrust in central banks or public institutions by some citizens, then the Digital Euro would be a net negative contribution for the ultimate objective the Digital Euro is supposedly trying to achieve. Unfortunately, some mismanagement of the project so far and the failure to confront the inherent limitations and risks of retail CBDCs openly are fuelling this narrative in the population, thus self-defeating the ultimate purpose. Trust, once lost, is extraordinarily difficult to restore. This challenge is not merely technical; it is deeply political. Data retention periods, access protocols, and oversight mechanisms are societal choices that require robust democratic debate and transparent legislative mandates. The highest privacy standards are what citizens are demanding from the authorities.

3. WHAT ARE WE TRYING TO SOLVE WITH A DIGITAL EURO?

Is the digital euro really trying to solve any real demand from EU citizens regarding their payments? Is it trying to mitigate any meaningful risk for the EU economy as a whole? Or, alternatively, is it just trying to solve the anxiety of some central banks about their "business model" or role in society? Introducing the central bank's *seigniorage* income into the discussions inevitably cast a large shadow that, maybe, thee Digital Euro

[9] European Central Bank, Eurosystem Report on the Public Consultation on a Digital Euro (Frankfurt am Main: ECB, April 2021), 10, https://www.ecb.europa.eu/pub/pdf/other/Eurosystem_report_on_the_public_consultation_on_a_digital_euro~539fa8cd8d.en.pdf.

is more shaped to solve ECB's perceived own problems rather than those of citizens after a careful assessment of market failures. As president Lagarde has repeatedly said, "*a central bank is not intended for profit purposes. If it was, it would defeat the mandate that we have, which is price stability. If it were driven by profit, it would impair our capacity to deliver on our mandate*"[10]. I do hope this principle also stands for the Digital Euro.

In any event, the origin of the central bank community's studies that led to the concept of a retail CBDC can be traced back to Meta's announcement in 2019 of a global multicurrency stable coin, known as *Libra*[11] . *Libra* was an unsuccessful initiative that never went beyond conceptual phase. The main perceived risk by central banks about the issuance of a multicurrency stablecoin by a BigTech company with billions of clients in its platform ecosystem was that of "currency substitution". This risk was more acute in jurisdictions where their own currency had historically failed to provide a stable economic environment (price, financial and exchange rate stability). Despite the "natural hedge" provided by the Euro Area comparative stability and the explicit failure of the *Libra* project itself, the ECB provided a formal response to the perceived threat, setting in motion an investigation phase for a potential Digital Euro.[12] The idea was to explore under which economic and/or institutional conditions it should be appropriate to issue a Digital Euro and what should be its main characteristics.

It is important to stress that initially the project was not focused on an unconditional issuance of a Digital Euro but to explore the conditions under which the best possible answer would be its issuance. How and why that intellectually open approximation has morphed into an unconditional push for the issuance of a Digital Euro despite a rapid changing environment and with shifting arguments to fit any potential audience is something others are due to explain. In any event, the truth of the matter is that current arguments used by the ECB to justify the potential issuance of a Digital Euro have expanded well beyond the initial narrative and include, among others:

i) A perceived imbalance between central bank money and commercial bank money due to the secular declining trend in the use of cash by citizens that might lead to a loss of the monetary anchor; [13, 14]

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[10] European Central Bank. Monetary Dialogue with Christine Lagarde, President of the European Central Bank (Pursuant to Article 284(3) TFEU), Brussels, Thursday, 20 March 2025. Frankfurt am Main: European Central Bank, 2025. https://www.ecb.europa.eu/pub/pdf/annex/ecb.sp250320_annex1.en.pdf.

[11] Libra Association, Introducing Libra: A Simple Global Currency and Financial Infrastructure That Can Empower Billions of People (Geneva: Libra Association, June 18, 2019), https://www.diem.com/en-us/updates/introducing-libra/

[12] European Central Bank, "Eurosystem Launches Digital Euro Project," press release, July 14, 2021, https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.pr210714~d99198ea23.en.html.

[13] Fabio Panetta, "Central Bank Digital Currencies: A Monetary Anchor for Digital Innovation," speech, Elcano Royal Institute, Madrid, November 5, 2021, European Central Bank, https://www.ecb.europa.eu/press/key/date/2021/html/ecb.sp211105~08781cb638.en.html

[14] Lane, Philip R. 2025. "The Digital Euro: Maintaining the Autonomy of the Monetary System." Speech at the University College Cork Economics Society Conference, March 20, 2025. European Central Bank. https://www.ecb.europa.eu/press/key/date/2025/html/ecb.sp250320_1~41c9459722.en.html.

ii) digital sovereignty and strategic autonomy in payments to reduce over-dependencies with non EU-based providers;[15]

iii) the risk of monetary substitution due to non-euro-denominated stablecoins: safeguarding the domestic role of the euro and strengthening its international role[16]

The emphasis placed on each argument has varied significantly along the 5-year gestation process of the project. The underlying narrative evolved from a defensive posture (*stop Libra*) to a more proactive ambition (*reshape Europe's role in digital finance*). This shifting/reactive pattern suggests that the project lacks a stable foundational rationale. This overextension weakens the clarity of the project and inflates expectations. The more problems it tries to solve, the less credible each solution becomes. A policy tool that aims to solve too many issues often solves none effectively. The digital euro is presented as a Swiss Army knife, but lacks precision for any specific problem and, as already discussed, entail profound inherent risks in terms of financial instability and privacy that, at best, could only be partially mitigated. Before designing a solution, policymakers must clarify: what exactly the problem is; whether it truly requires a public response; and whether that answer must take the form of a retail CBDC.

Some of the problems identified may have some validity and, to be clear from the onset, I do believe the risks associated to overdependence of non-EU actors in the digital payments area are real now and should be addressed through an optimal risk management strategy. But for this we do not necessarily need to issue a Digital Euro as currently designed if innovative, European, pan-European in scale, commercial bank money-based solutions are promptly made available for EU citizens for their on-line, in-store and peer to peer payments. The rest of this chapter is aimed at analyzing each of the arguments used to justify the potential issuance of a Digital Euro and whether it is the optimal solution to each.

i. A perceived imbalance between central bank and commercial bank money: the declining use of cash and the risks to the monetary anchor.

Before the advent of the concept of a retail CBDC, it was a widely accepted fact that private actors, through commercial bank money, would drive innovations associated with new characteristics of money that will make payments more convenient to customers. This has led for more than half a century to a trend of a declining relative preva-

[15] Piero Cipollone, "The Role of the Digital Euro in Digital Payments and Finance," European Central Bank, February 28, 2025, https://www.ecb.europa.eu/press/inter/date/2025/html/ecb.in250228~7c25c90e4d.en.html

[16] European Central Bank, Stablecoins: Implications for Monetary Policy, Financial Stability, Market Infrastructure and Payments, and Banking Supervision in the Euro Area, Occasional Paper No. 247 (Frankfurt am Main: European Central Bank, September 2020), 21, https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op247~fe3df92991.en.pdf.

lence of cash, both as a means of payments and as a store of value. Is this a problem? And if so, why now and why only in the Euro Area?

The secular decline in the use of cash across the euro area has raised concerns by the ECB about the future balance between central bank and commercial bank money[17]. In its view, the progressive reduction in the use of cash *vis a vis* commercial bank money risks eroding the public's trust in the currency itself. This argument hinges on the assumption that the unicity of money (the notion that all euros are fundamentally equivalent) is basically achieved thanks to the possibility to withdraw at par (1 euro for 1 euro) the commercial bank money deposited in a bank account into central bank issued banknotes. According to this argument, the reduction in the use of central bank money by citizens (currently only cash), if left unaddressed, is seen by the ECB as potentially undermining its role as the ultimate anchor of the monetary and financial system.[18]

The ECB argues that a digital euro would help preserve this monetary anchor by offering a public digital means of payment accessible to all, thereby sustaining trust in the currency and in the central bank itself [19]. A stronger version of the argument highlights that there is some sort of a sweet spot equilibrium or a "tipping point" between commercial and central bank money and we may risk trespassing it with unknown but dangerous consequences. And so the argument goes, we need a Digital Euro to restore the balance. How real is this risk and does the Digital Euro satisfactorily solve this problem if it really exists?

First, no one is proposing to ban the use of cash, neither for payments nor as a store of value, quite the contrary. If some citizens may feel compelled to physically "touch" their money in the form of central bank physical money to keep trust in the unicity of money they may continue to do so. So there is no logical connection between the decline in the use of cash for paying transactions from their potential use as store of value in some contingencies. Second, the unicity of money is not only underpinned by the capacity to convert commercial bank money into cash at par. On the contrary, it is fundamentally based on the capacity of every citizen to move their deposits at par from one bank to another. This is ensured because the transfer can be settled through the central bank balance sheet using bank reserves. As the Assistant Governor of the Reserve Bank of Australia put it[20]:

> *"A key feature of our monetary arrangements is that bank deposits are interchangeable with one another and central bank money, on a dollar-for-dollar basis (this is the*

[17] Lane, Philip R. 2025. "The Digital Euro: Maintaining the Autonomy of the Monetary System." Speech at the University College Cork Economics Society Conference, March 20, 2025. European Central Bank. https://www.ecb.europa.eu/press/key/date/2025/html/ecb.sp250320_1~41c9459722.en.html.

[18] Panetta, *Central Bank Digital Currencies.*

[19] Panetta, Central Bank Digital Currencies.

[20] Brad Jones, "Financial Innovation and the Future of CBDC in Australia," speech at the Intersekt Conference, Melbourne, September 18, 2024, Reserve Bank of Australia, https://www.rba.gov.au/speeches/2024/sp-ag-2024-09-18.html

'singleness' concept). This spares households and merchants from wasting resources in repricing the credit risk of different issuers – a lesson learned the hard way from the chaotic 'wildcat' free-banking era in the United States. It has been suggested that if physical cash was no longer available to the public, a retail CBDC may be needed to ensure private money retained its value because it would still be interchangeable at par with central bank money. However, most central banks have no plans to eradicate physical cash. And central banks already support the singleness of money in various ways, including by settling banks' net payment claims 'at par' in central bank money"

And this is not a Digital Euro or even a wholesale CBDC, this is what already exists now. Reserves at the central bank guarantee not just interbank settlement or the unicity of money, also the capacity of the public monetary authority to steer monetary policy. This is explicitly recognized by the analysis of other advanced central banks when justifying the abandonment of further retail CBDC studies. And in this dimension Europe is not different to the rest of the advanced economies in the world[21] It is therefore legitimate to ask: why is the euro area the only major jurisdiction responding in such an untested and far-reaching manner?Third, the decline in the use of central bank money in the form of cash has been mostly demand driven. That is to say that the main driver for the increased role of commercial bank money has been changes in people's preferences and the emergence of new innovative features associated to commercial bank money (particularly its digital form and the associated convenience advantage as a means of payment in many cases, lower costs, etc.). A private ecosystem of innovative payment service providers, infrastructure developers, technical standards, etc. have emerged in recent decades. Should the central bank push back to reverse, stop or moderate this trend? From a principles' perspective in a competitive market economy it is hard to argue that the public sector should try to push back if private actors develop something that is favoured by consumers. Of course, this is not to say that public money should not improve, it is simply to state that preserving the current *status quo* is not by itself a legitimate reason to develop a Digital Euro. For such a drastic public intervention to be warranted it has to be proven beyond any reasonable doubt that the current or foreseen reduction in the use of cash may create fundamental problems to the overall economy loss of monetary anchor, currency substitution, etc. Is this the case?

A first key consideration as already discussed, is that there is no empirical or strong theoretical evidence showing that there is any "optimum" level of commercial *versus* central bank money in terms of social welfare. In fact, we can learn from the experience of other countries that are further ahead in the adoption of digital means of payment (in the EU the use of cash is still around 50%[22] of transactions, while in Sweden it went

[21] Reserve Bank of Australia and Australian Treasury, Central Bank Digital Currency and the Future of Digital Money in Australia (Canberra: RBA and Treasury, 2023), 13, https://www.rba.gov.au/publications/consultations/2023/cbdc-digital-money/pdf/cbdc-digital-money.pdf

[22] European Central Bank, Study on the Payment Attitudes of Consumers in the Euro Area 2024 (Frankfurt am Main: European Central Bank, 2024), https://www.ecb.europa.eu/stats/ecb_surveys/space/html/ecb.space2024~19d46f0f17.en.html.

as low as very near "single digit" before naturally bouncing back) is that there is no monetary regime change due to a reduction in the use of cash even at very low levels of cash usage. And there is also empirical evidence that the effective use of cash, if left freely to the willingness of citizens, does not converge to zero as it offers some useful characteristics the population favours in some circumstances of their daily lives.[23]

A second important aspect concerns that this is by no means a European-specific problem. All advanced economies are facing similar challenges related to the increased use of digital means of payments. They have all explicitly considered the potential use of CBDC and none of them has made a retail CBDC the backbone of their retail payments strategy (except China for reasons of increasing governmental oversight of citizens' daily life that can and will never apply to the EU). If anything, more and more central banks in the world are seeing the wholesale CBDC and the provision of infrastructure as the core of their response (see section 5 for a more detailed discussion). In any event, if the ECB is seeing something that nobody else in the world is seeing in relation to a supposedly "optimal ratio" between commercial and central bank money, it would serve the general good if they could make that explicit and also explain why others have crossed it years ago and nothing catastrophic apparently happened there.

In light of the above, while the ECB presents the Digital Euro as a necessary evolution to preserve public access to central bank money, the assumption that such access must be maintained in a digital form to uphold the monetary anchor is neither empirically nor theoretically substantiated. Therefore, given the intrinsic risks associated to any retail CBDC (essentially, financial stability and privacy concerns) and the impossibility to hedge against them completely through proven safeguards, the Digital Euro should not be considered the optimal policy response based solely on this argument.

ii. Digital sovereignty and strategic autonomy in payments: reducing reliance on non-European providers and increasing resilience.

The Digital Euro discussion is also framed within the broader context of the European Union's pursuit of an open strategic autonomy and a digital sovereignty. In the field of payments, the EU remains structurally dependent on non-European players, particularly US-based international card schemes. Even without resorting to a potential weaponization of this dependency, this over-reliance has long-term implications not only for competition and innovation, but also for Europe's capacity to enforce its regulatory preferences and protect its autonomy in a more fragile geopolitical context.

As already mentioned, this is, in my opinion, a real risk. While international card schemes as of today have no incentive to voluntarily cease operating and serving the EU market, the real risk is them being politically forced to do so. The probability of such tail risks may remain low, but it is no longer negligible. As such, taking effective actions

[23] Sveriges Riksbank, Payments Report 2025 (Stockholm: Sveriges Riksbank, 2025), https://www.riksbank.se/en-gb/payments–cash/payments-in-sweden/payments-report-2025/.

to reduce Europe's over-dependence on non EU-based payment providers is politically and strategically sensible.

However, the root of the EU's vulnerability is not the absence of a central bank digital currency, but the continued fragmentation of the European payments landscape.. Therefore, it is imperative to create an ecosystem conducive to pan-European actors in digital payments. In this regard, payments sovereignty is less about the issuer of money than about who governs the infrastructure, controls the data, and defines the user experience. In fact, international card schemes are private enterprises that mobilize commercial bank money. The challenge of platform and scheme dependences lie not in the lack of a CBDC, but in the lack of competitive, interoperable European alternatives at scale to international card schemes. Visa and Mastercard did not achieve dominance because they are forms of central bank money, but precisely on the opposite: because they operate global networks with high reliability, speed, user-friendliness, and global merchant acceptance. For the first time in several decades this market structure could be challenged globally as many jurisdictions beyond the EU are perceiving similar geopolitical risks at the same time.

The ECB presents the digital euro as a foundational infrastructure that could contribute to Europe's monetary and technological autonomy. However, the strategic case for a CBDC in this regard is far from conclusive. Achieving autonomy does not necessarily require the introduction of a new form of money in the form of a CBDC. Rather, it may be more effectively pursued through a combination of regulatory clarity, support for European payment initiatives, and the promotion of interoperability and scale in private-sector solutions based on commercial bank money. Fortunately, now this is not just wishful thinking. Several private -originally national- digital payment solutions are now coalescing through cooperation and interoperability arrangements with the explicit aim of achieving a pan-European scale[24]. Their shared goal is to build a pan-European ecosystem of interoperable, instant mobile payments that preserve the user experience citizens are already accustomed to in their national contexts. This movement reflects a new level of private-sector alignment that was not present in earlier attempts at integration. While the absence of such coordination hampered initiatives like EPI in 2017, today's progress—enabled by the maturity of infrastructures like TIPS and the development of SEPA Instant—marks a turning point. The commitment underscores the collective readiness to build a common payments infrastructure grounded in local trust, European standards, and private innovation[25]. The private sector has shown that, under the right conditions, it can deliver tangible progress toward strategic goals.

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[24] BTW Media. European Mobile Payment Systems Achieve Cross-Border Interoperability. March 5, 2024. https://btw.media/fintech/european-mobile-payment-systems-achieve-cross-border-interoperability/
BNP Paribas. Wero: A New European Instant Payment Solution. Accessed April 30, 2025. https://group.bnpparibas/en/news/wero-a-new-european-instant-payment-solution

[25] Bizum, Bizum y las principales soluciones de pago europeas celebran el Día de Europa reafirmando su compromiso con un ecosistema digital interoperable, May 2025. https://bizum.com/es/notas/bizum-y-las-principales-soluciones-de-pago-europeas-celebran-el-dia-de-europa-reafirmando-su-compromiso-con-un-ecosistema-digital-interoperable/

These are not just plans; they are already delivering on the ground integrating several national digital payment solutions into transnational solutions. In addition, their plans to fully achieve a pan-European scale could go even faster than the roll out plans of the Digital Euro. According to current estimates by the ECB itself, the Digital Euro can only be delivered on the ground after at least two and a half year of development and testing after approval of the relevant legislative proposals[26].

How should we measure success on the part of the private sector in addressing this excessive external dependency? The objective should not necessarily be to displace current foreign providers in normal times, but to increase competition through relevant European actors ready to fill the gap if geopolitical risk ever materialized and foreign providers cease to serve our market. We do not need champions but contenders able to fill the void if needed. Of course, if market forces lead these new entrants to be dominant by displacing current incumbents, so be it. This should not be the policy target in itself but, in my view, it should also not be prevented *ex ante* from a competition standpoint.

Beyond overreliance on non-European providers, resilience also has a physical dimension. The case for the Digital Euro, particularly for its offline functionality, includes its potential in increasing payments resilience in case of physical risks like floods, outages, etc. Although cash has demonstrated many times its usefulness in some of these contingencies, to provide more payment alternatives robust to them might be a desirable feature.

The offline functionality in the current Digital Euro proposal offers *a priori* enhanced privacy characteristics *vis a vis* the "full fledged" on-line digital euro. In addition, it may operate mainly as a "pre-paid" wallet. Furthermore, given that the intrinsic characteristics of the offline Digital Euro makes it a closer digital version of a banknote it might be advisable that the same national transaction limits that currently apply to cash in many EU countries, should also apply to it.

Given that private payment providers are not prioritizing offline solutions, this is a niche where public intervention might be justified—provided the design remains simple, inclusive, and supportive of the broader payment ecosystem.

However, resilience and strategic autonomy are not only about reducing dependencies or about withstanding shocks; they also depend on the capacity to innovate in the medium/longer-term. The fundamental advantage of private solutions based on commercial bank money is not just avoiding the inherent unmitigated risks of retail CBDCs, but also fostering the long-term incentives to sustained innovation. Retail CBDCs like the Digital Euro face structural disadvantages in this regard. Public institutions like

[26] Piero Cipollone, Introductory Statement at the Committee on Economic and Monetary Affairs of the European Parliament (ECON), European Central Bank, April 8, 2025, exchange of views following introductory remarks at 16:33:40, https://www.ecb.europa.eu/press/key/date/2025/html/ecb.sp250408~40820747ef.en.html https://multimedia.europarl.europa.eu/en/webstreaming/committee-on-economic-and-monetary-affairs-ordinary-meeting_20250408-1430-COMMITTEE-ECON

the ECB lack commercial incentives, agility, and market-facing experience to iterate product design or scale across borders at the speed of innovation. A digital euro, with its design constraints (such as holding limits and the "waterfall" and "reverse waterfall features"[27] that multiply technical complexity and points of failure), is unlikely to match the usability, agility, product quality or appeal of private sector solutions based on commercial bank money. By contrast, private firms innovate at rapid cycles, adjust to user behavior in real time, and could scale globally. The ECB, in contrast, is constrained by institutional procedures, political oversight, and a non-commercial mandate. These differences are not just in degree — they are structural and insormountable.

In light of these considerations, Europe would arguably achieve more strategic autonomy by fostering scalable, interoperable private-sector solutions, coupled with appropriate regulation. Thus, while the ECB correctly diagnoses a problem, the solution may lie more in policy and coordination than in digital currency issuance.

Finally, while the digital euro's offline functionality offers some resilience-enhancing features—such as enhanced privacy and crisis usability—it remains unclear whether the marginal benefits justify the unmitigated financial stability risks and development costs. A rigorous cost-benefit analysis is essential, including an estimation of citizens' willingness to pay for such attributes, in order to assess whether the offline digital euro should be pursued as a complementary instrument rather than the cornerstone of Europe's payments strategy.

iii. The risk of monetary substitution due to non-euro-denominated stablecoins: safeguarding the domestic role of the euro and strengthening its international role.

Safeguarding the domestic role of the euro

A further justification invoked by the ECB concerns the proliferation of crypto-assets and, more specifically, the emergence of stablecoins— digital tokens that seek to maintain a stable value, often pegged to foreign currencies such as the US dollar. The ECB has expressed concern that, if left unchecked, these instruments could gain traction within the euro area, leading to partial monetary substitution in digital environments, particularly in cross-border contexts or within closed digital ecosystems.

The reality is that stablecoins today serve mainly as interface platforms between the crypto-world and the traditional fiat money financial system. Their value do not come from being widely accepted as a means of payment, but rather from the fact that they can be exchanged for fiat money without excessive volatility in their prices. There is

[27] "Waterfall" and "reverse waterfall" are the processes through which a digital euro account is automatically credited or debited against a traditional, commercial bank money-payment account, in order to keep the limits while allowing transactions of higher amounts. So, if more digital euros come to a holder beyond the holding limit, the excess is automatically transformed into commercial bank money and transferred to the associated traditional payment account. Conversely, if a transaction requires more digital euros they can be automatically taken from the associated traditional payment account.

also no indication they are particularly well prepared to serve as a full-scale means of payment as the failed *Libra* project attests. Beyond scant anecdotal evidence, the use of stablecoins as means of payment, (especially in monetary areas different to those of the fiat currency they are pegged to) is extremely rare. As EU citizens will continue to have most of their income and wealth denominated in euros, using dollar denominated (and pegged) stable coins as means of payments would mean for EU citizens to constantly assume, manage and hedge the volatility of foreign exchange risk on a regular basis. Are there really incentives for a significant proportion of the EU population to engage in such financial risks in their daily lives in order to enjoy the potential additional conveniences of paying with a stablecoin? As a niche market, maybe; on a general scale, does not seem likely and definitely no way if the ECB delivers on its mandate of price and financial stability.

Does this mean that the EU should do nothing about stablecoins? Of course not. But the optimal response should lie in robust regulatory oversight — such as that currently provided by the Markets in Crypto-Assets (MiCA) Regulation[28] and its future improvements—. These regulatory mechanisms offer a targeted and proportionate response. By contrast, introducing a Digital Euro to counter a highly speculative threat, risks being both premature and overreaching.

All in all, the Digital Euro (optimized as means of payment) is neither necessary nor sufficient to neutralize the risk of monetary substitution (that fundamentally stems from the unit of account and store of value functions of money). A strong regulatory regime is a more direct, proven and flexible tool.

Promoting the international role of the euro

The ECB has positioned the Digital Euro as a potential lever to reinforce the international role of the euro.[29] Despite being the world's second most used currency, the euro remains significantly behind the US dollar in terms of global reserves, invoicing in global trade and commodities, and the denomination of financial instruments. A retail CBDC, particularly if designed with cross-border (beyond the EU) functionality in mind could theoretically enhance the attractiveness of the euro in international retail payments by offering a secure, efficient, and technologically advanced alternative.

However, the extent to which a retail CBDC can alter the global monetary hierarchy is extremely limited. Retail payments are not the main driver of international capital flows. The internationalisation of a currency is driven primarily by the depth and liquidity of its capital markets, the credibility of its institutions, the size of its economy, and

[28] European Parliament and Council of the European Union, Regulation (EU) 2023/1114 on Markets in Crypto-Assets, OJ L 150, June 9, 2023, 40–205, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R1114.

[29] European Central Bank, "The Euro as a Global Currency: A Payments Perspective," in Economic Bulletin, Issue 2/2024, Focus Box 7 (Frankfurt am Main: European Central Bank, 2024), https://www.ecb.europa.eu/press/economic-bulletin/focus/2024/html/ecb.ebbox202402_07~4279fee463.en.html.

therefore the global demand for assets denominated in that currency. While the Digital Euro could play a complementary role in reinforcing the euro's appeal, it is unlikely to act as a transformative factor in the absence of broader structural reforms, including progress towards a Savings and Investments Union[30] and the development of a deep market for EU safe assets, among other structural changes.

Against this backdrop, it is worth recalling that a wholesale CBDC that might help the EU to become the first global capital market to have instant settlement in securities transactions has far more transformative effects in terms of EU capital markets attractiveness, and therefore on the international role of the euro.

Ultimately, while the Digital Euro may serve as a symbol, it is not a credible instrument for fundamentally shifting the balance of monetary power at the global level. The strategic case remains aspirational rather than operational, and risks inflating expectations that the instrument, by design, cannot meet.

While the Digital Euro may hardly contribute to substantially increase the international role of the euro at the aggregate level, a very important related risk is that of promoting currency substitution in smaller border countries, either in EU outside the Euro Area countries or in the EU "neighbourhood countries". Because here proximity matters. According to the current proposal for an agreed full-scale adoption of the Digital Euro by the population of a third country, central bank to central bank agreements are necessary which is a *sui generis* form of tacit consent for potential currency substitution. These agreements are also considered part of the safeguards designed to mitigate the inherent risks of the Digital Euro.

However, it is worth noting that all travellers entering the Euro Area may have access to a Digital Euro wallet in principle for their payments while staying in the Euro Area. But nothing can prevent them to keep or recharge their wallets afterwards back at home and use them on a regular basis for their on-line, peer to peer and in-shop payments. As most EU currencies are pegged to the Euro they would not be incurring in large foreign exchange risks (contrary as we have seen when discussing the risk of monetary substitution because of non-euro denominated stablecoins). And this is in normal times. The risk of facilitating currency substitution in stress times in these countries for anyone that has ever visited the Euro Area is much larger and practically easier that it is possible now with Euro bank notes. This potential unintended consequence is completely unaddressed in the current Digital Euro proposal. Is the EU internal political fabric or our neighbourhood policy ready to resist the political tensions this phenomenon of unwanted (from the perspective of the non-Euro Area countries authorities) eurization of their populations. Let us be clear, euro adoption is a target for many countries but it has to be achieved in a consensual and planned way, not by imposing facts on the ground. If not, political tension may mount to very high levels; in my view, too high a cost for a promise of easier payments.

[30] European Commission, Savings and Investments Union: A Strategy to Foster Citizens' Wealth and Economic Competitiveness in the EU, COM(2025) 124 final (Brussels, March 19, 2025).

Taken together, while the overall impact of the Digital Euro on cross-border usage of the common currency is likely to be limited, however, on bordering countries not having adopted the euro, the potential risk of incentivizing unwanted eurization cannot be dismissed. The consequence would be to promote financial and political instability along the euro area borders.

Is the Digital Euro the best policy response?

To sum up, the arguments reviewed in this section reveal a striking disconnect between the challenges identified by the ECB and the European Commission and the capacity of a Digital Euro to effectively address them. While some concerns might have some validity, the digital euro appears to be a misaligned or insufficient response in each case. Either the problems are overstated, can be addressed more directly through regulatory or structural measures, or entail unintended consequences that outweigh the proposed benefits. Rather than acting as a targeted remedy, the Digital Euro risks becoming a solution in search of a problem—overburdened with expectations and structurally constrained by design trade-offs stemming from its very nature as a retail CBDC.

4. OTHER RISKS AND DEFICIENCIES ASSOCIATED TO THE CURRENT DIGITAL EURO PROPOSAL.

Once we have analysed the inherent risks of any retail CBDC and also the merits and limitations of the main arguments used to support the Digital Euro, in this section, we will outline other risks, deficiencies and limitations that are linked to the specific proposal for a Digital Euro put forward by the European Commission.

The current proposal for a Digital Euro introduces structural risks and far-reaching policy implications that extend well beyond monetary policy. It raises critical concerns related to democratic legitimacy, market dynamics, the structure of financial intermediation, consumer protection, and long-term innovation capacity.

The current EU Commission proposal largely sidesteps vital considerations for the Digital Euro, such as cybersecurity, the competitive and supervisory landscape of digital payments, and the broader structure of financial intermediation. A retail CBDC is not merely an extension of the ECB's existing toolbox. It fundamentally reorders how money is created, distributed, and used in day-to-day transactions, structurally affecting financial intermediaries. As such, it deserves to be analysed as a distinct policy domain rather than shoe-horned into a monetary-policy framework alone. It is a first-order financial policy instrument.

Indeed, the real-world implications of a Digital Euro extend far beyond monetary policy transmission. The ECB would inevitably assume or delegate unprecedented responsibilities at the consumer level like fraud detection, cyber-incident response, consumer compensation for damages, and managing the infrastructure of a scheme, it has designed. Traditionally, the public sector has set the standards for consumer protection against fraud and customers' data protection, and then the regulated private sector intermediaries, using their capillarity and "know your customer" (KYC), design their own products and set up the necessary countermeasures depending on the risk assessment and perceived vulnerabilities. All this in the understanding that if the measures they put in place fail to meet the standards set by legislators and regulators these intermediaries should be liable. No arrangement is perfect but at least there is an alignment between agency and responsibility. But for the Digital Euro the scheme is totally different. Due to the lack of capillarity and KYC on the part of the Eurosystem the current proposal delegates this task to private third parties which have not designed the platform or the scheme (rulebook) nor can apply their own bespoke safeguards in the platform to prevent systemic frauds as they do not operate it (they may operate "in" it). In the end, there would be a complete misalignment between agency to effectively prevent fraud and potential liabilities, all with EU citizens in the middle.

In addition, the Digital Euro could disincentive further investments by private payment providers or even disintermediate them altogether. If a central bank mandated infrastructure and scheme is imposed to merchants through the legal tender status of the Digital Euro, the natural consequence is that private sector actors will scale back their investments to achieve a pan-European scale and will be locked in to this platform and scheme for future developments. This could lead to market distortions that reduce competition, concentrate operational and systemic risks, and ultimately undermine the resilience and innovation potential of the broader payments ecosystem. These risks are compounded by the centralization of retail payments through a single public ledger, which may marginalize payment service providers, ranging from traditional banks to challenger fintechs, and reduce the diversity of actors in the marketplace. Such concentration could limit consumer choice and amplify systemic vulnerabilities.

Although we have already addressed the question of innovation, highlighting that the private sector is better positioned to respond swiftly in a changing environment and therefore enhance resilience, it is worth reiterating that any public intervention must be justified by a clear market failure that private actors are unable to resolve. Given the thriving development of Fintech wallets, instant payment infrastructure, and token based solutions, it is not evident that such a justification currently exists. This is particularly true in the current European context, where the payments ecosystem is actively tackling the challenge of overcoming fragmentation and achieving true pan European reach through interoperability, competition, and innovation. By contrast, the Digital Euro proposal appears to rely on a centralized approach that risks overlooking the market-led progress already underway. Moreover, it positions the ECB as both a major retail payment operator and a supervisor of the same industry—an institutional duality that raises questions about potential conflicts of interest that might lead to deterring private innovation and distorting regulatory neutrality. Such a configuration challenges basic principles of institutional balance and risks undermining trust in both market governance and central bank impartiality.

Equally pressing are the long- term governance and maintenance questions that the current legislative draft leaves open. Essential decisions—such as the authority responsible for rolling out software updates, the entity charged with compensating users in the event of system outages, and the bodies empowered to define minimum cyber- resilience standards—remain largely undefined. Furthermore, the division of roles between the ECB, national central banks (NCBs), and private intermediaries lacks clear legal anchoring. Without a binding governance framework detailing funding mechanisms, upgrade cycles, and redress procedures, the Digital Euro risks operational fragmentation, inconsistent service levels across member states, and an inability to respond swiftly to emerging threats.

From the very beginning, innovation in payments has gone hand in hand with access to credit facilities. Traditional credit cards, buy now and pay later offerings, and whatever may come next have all paired payment functionality with credit provision. All of this is out of the question for the Digital Euro, which is strictly restricted to debit functionality given its nature as a central bank liability. So what is really the role of the Digital Euro as a support for innovation? It may very well become a structural limitation. Once payment service providers lock-in to the Digital Euro infrastructure and standards, which necessarily reflect the constraints of a central bank liability, the scope for innovation narrows dramatically. This should not come as a surprise. The ultimate reason why cash has not been the foundation for innovation in payments lies not only in its physical nature but also in its central bank liability status. Tying the future of European payment innovation to the Digital Euro means accepting a serious risk of accelerated obsolescence.

Also, the very nature of the Digital Euro as a central bank liability and the necessity of the ECB to keep the "unicity of the euro" (in fact, it is one of the alleged reasons for launching it) implies that a strong "no programmability clause" has to be incorporated to the design. While conditional payments would still be possible, fully programmable money would no. This would practically mean, for example, that a public subsidy targeted to a particular subset of the population for a particular use (house rental payments, energy costs, etc.) would never enjoy a built-in anti-fraud design through programmable money if paid and used through the Digital Euro. How can the Digital Euro be a credible source of innovation if its very nature precludes one of the most obvious innovation for the future of digital payments: programmability.

Taken together, these risks, ranging from privacy concerns and financial stability to market disruption, suggest that the proposed Digital Euro would extend well beyond the ECB's traditional remit. This naturally brings into focus the question of the ECB's mandate and its democratic oversight. The Treaty on the Functioning of the European Union empowers the ECB to define and implement monetary policy and to ensure price stability—but it does not explicitly grant it the authority to build or operate consumer-facing digital payment infrastructures. It certainly does not empower it to design and execute a general-purpose financial policy without political legitimacy.

For precisely these reasons, the decision to issue a retail CBDC (not just to define its main characteristics) cannot rest within the Eurosystem alone. Legislative co-decision by the European Parliament and Council is essential: only they can weigh the full spectrum of trade-offs—between privacy and traceability, innovation and stability, public provision and private competition—and endow the Digital Euro with the democratic legitimacy it demands. Far from being a dry, technocratic exercise, the design and issuance of a CBDC entails profound societal choices. Foundational questions about surveillance risk, data governance, and digital identity cannot be retrofitted after the fact; they must be baked into the legislation from day one and be carefully assessed at the time of issuance.

The issue of who bears the costs is also unresolved. Who pays all the costs of developing a new infrastructure, keeping new digital euro accounts, updating terminals, issuing wallets, etc.? The complex issue of compensation in traditional card schemes and its current heavy regulation is compounded with the fact that the current Digital Euro design creates additional complexity due to the existing "waterfall" and "reverse waterfall" mechanism that create up to two additional by-payments for each genuine transaction. As already mentioned this is because merchants will have a cero-holding limit and consumers may want to buy goods and services of higher value than the imposed holding limit. If it were not difficult enough to find a reasonable equilibrium to keep incentives and competition in the so-called 4 corner compensation model, the extra complexity of the Digital Euro leads to what we may call a 6 corner payment model. No international practical or theoretical experience exists on how to do this efficiently. The current proposal just ignores the problem (and the incentives) altogether. But the reality is that all costs have to be paid one way or another and the Digital Euro should not become a massive exercise of hidden subsidies without democratic oversight run by a dominant market player that also happens to be the supervisor/overseer of the other players. The end result: a nightmarish market structure for anyone caring about proper incentives and institutional balance.

As a matter of conclusion for this section, an excess of technocratic focus has so far overshadowed deeper policy and political considerations, including: (i) the optimal division of labour between public authorities and private actors in designing and delivering payment innovations; (ii) the long term risks of centralizing innovation and infrastructure in a public system; and (iii) the centrality of privacy to citizens' trust in the monetary system. To date, the ECB has driven the Digital Euro initiative with technical analyses and design leadership, while political and legislative scrutiny has lagged behind. Other EU institutions remain cautious partly because a clear, compelling narrative justifying the project is still missing. Without that political anchoring, the Digital Euro risks becoming a purely technical solution in search of a problem to solve.

Against this backdrop of significant risks, deficiencies, and democratic concerns surrounding the current Digital Euro proposal, it becomes essential to situate the European debate within a broader international context. Understanding how other jurisdictions—facing similar technological, economic, and geopolitical challenges—are approaching the question of retail CBDCs provides valuable perspective. In the following section, I will examine the global landscape of digital currency initiatives, exploring why most advanced economies have so far refrained from committing to launch a retail CBDC.

5. COMPARATIVE LENS: WHY ARE WE THE ONLY ONES DOING THIS?

Understanding how other major jurisdictions approach CBDCs offers critical perspective on whether Europe's trajectory shows global best practices or whether it risks strategic isolation.

5.1. GLOBAL LANDSCAPE: WHERE OTHER JURISDICTIONS STAND?

Most advanced economies have explored the potential of CBDCs but remain markedly cautious about their retail deployment. As already pointed out, in Australia its central bank and the Treasury jointly decided in 2024 to stop investing resources into a potential retail CBDC issuance and decided to concentrate efforts to study the potential of a wholesale CBDC for Australia[31]. In the United States, the Federal Reserve in the past years had limited its efforts to wholesale applications, primarily focusing on interbank settlement; more recently, in 2025, the US administration has completely abandoned any retail CBDC work[32]. Similarly, the United Kingdom continues to conduct extensive consultations, emphasizing principles such as privacy protection and competitive neutrality and has explicitly indicated that no issuance decision is imminent[33].

Other jurisdictions adopt a comparably measured approach. Canada and Japan are actively engaged in research and limited pilot programs, yet retail issuance remains a low policy priority. Brazil offers a hybrid model. On the one hand, the Central Bank of Brazil developed and operates with success PIX an instant payment solution based on commercial bank money. On the other hand, there is the Drex project, wherein they are exploring how to tokenize commercial bank money with distributed ledger technology and infrastructural support from the central bank —a model that maintains the private sector's primary role in payments innovation. India has initiated pilot testing of a retail CBDC (e-‑R) structured around a two-tier distribution model: the Reserve Bank of India issues digital tokens to commercial banks, which then distribute them to users. This design prioritizes token-based functionality, offline capabilities, and seamless integration with the already successful Unified Payments Interface (UPI) system based on instant payments for commercial bank money accounts. Their objective: to

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[31] Poner de nuevo la referencia al estudio conjunto

[32] Strengthening American Leadership in Digital Financial Technology," Executive Order, The White House, January 23, 2025, https://www.whitehouse.gov/presidential-actions/2025/01/strengthening-american-leadership-in-digital-financial-technology/.

[33] Bank of England. "Progress Update: The Digital Pound and the Payments Landscape." February 2025. https://www.bankofengland.co.uk/report/2025/digital-pound-progress-update

reduce cash dependency, improve financial inclusion without undermining financial intermediation.

The only major economy to have moved decisively toward a retail CBDC similar in concept to the Digital Euro is China with its e-CNY. However, this project must be contextualized within China's distinct political and economic environment, characterized by strong state control over financial and data infrastructures — a framework fundamentally incompatible with the European Union's founding values of privacy, decentralization, competition and individual rights.

5.2. NO RETAIL CBDC IN SIGHT ELSEWHERE: WHY?

The absence of fully operational retail CBDCs in other leading economies does not reflect a lack of technical capability. Rather, it evidences a collective caution rooted in sober assessments of the systemic implications. Across jurisdictions, central banks consistently cite concerns over potential risks to financial stability, insufficient consumer demand, and uncertain cost-benefit outcomes as key reasons for abandonment, postponement or non-issuance.

Importantly, other monetary authorities appear to recognize the essential role of private-sector actors in the highly dynamic payments ecosystems. Initiatives to enhance real-time payments, digital wallets, and tokenized bank money typically prioritize leveraging competitive market dynamics rather than replacing them with public-sector alternatives. This reflects a broader strategic judgment: that robust, interoperable, and inclusive payment infrastructures can evolve organically without necessitating radical disruptions to existing financial intermediation models that might compromise investments and innovation in the long run.

5.3. LEADERSHIP OR STRATEGIC OVERREACH?

In evaluating the global landscape, an important distinction must be drawn between genuine leadership and strategic overreach. Leadership in payments innovation demands clear articulation of public purpose, careful calibration of systemic risks, and alignment with societal needs. What no jurisdiction (except the EU) has even conceived so far is to go directly from legislation to full deployment without carefully designing small scale pilot projects to detect unforeseen problems in such a disruptive decision. Haste risks mistaking technological capability for need, and institutional anxiety for strategic prudence.

The European Union's early and assertive pursuit of a retail CBDC could certainly position it as a pioneer. Yet without compelling market-driven demand, a fully developed risk mitigation framework, or broad-based societal consensus, such leadership risks becoming performative rather than substantive and counterproductive. Acting in isolation, especially in a domain as sensitive as payments and financial stability, may weaken and isolate the EU rather than strengthen Europe's global position —binding it to a technological path others have consciously decided to avoid after careful inspection.

Having considered the comparative global landscape it becomes clear that alternative pathways deserve serious consideration. In the following section, I will outline an alternative proposal that preserves the euro's integrity and while promoting autonomy, innovation, competition, and scalability in digital payments across the European Union.

6. A POSSIBLE WAY FORWARD

Some of the challenges identified in the debate around the digital euro, like the overreliance on non-European providers are real and deserving of policy attention. The ECB and the European Commission have made significant contributions in bringing these issues to the forefront. As Europe seeks to strengthen its strategic autonomy and modernize its payments ecosystem, a coherent and future-oriented approach is required—one that balances resilience, sovereignty, innovation, and democratic legitimacy. This section outlines a vision for the future of digital payments in the euro area based on three core pillars: (1) a competitive, innovative, interoperable private-sector payment infrastructure mobilizing commercial bank money, (2) a targeted and privacy-preserving offline digital euro for resilience and inclusion, and (3) a wholesale CBDC to support financial market integration and international competitiveness. These components, aligned with the respective comparative advantages of public and private actors, should, in my opinion, be our European "Plan A". It offers a more proportionate and effective path forward than a full-scale, general purpose retail CBDC with all its risks and inherent limitations as it is currently proposed by the European Commission.

Unfortunately, the current legislative portraits the Digital Euro as Europe's *Wunderwaffe* in the area of payments instead of focusing on leveraging in all the investments (public and private) already made into the EU instant payments infrastructure and help the payments ecosystem to really deliver to achieve a pan-European scale finalising the era of national fragmentation. Admittedly, this route is less fanciful than creating a new form of money but the risk-reward proposition is much clearer.

The original legislative proposal by the European Commission dates back to 2023, a moment when the geopolitical landscape was markedly different, the digital payment industry had yet to demonstrate coordinated initiative, and the urgency for strategic autonomy in payments had not fully crystallized. Today, Europe faces a more volatile global context and heightened cyber risks. It is therefore imperative that any policy solution adopted by legislators reflects and integrates these evolving realities. By building on existing capabilities and promoting real public-private collaboration, the EU can enhance its payment ecosystem in a manner that preserves institutional balance and supports innovation. Recent developments demonstrate the potential of this path.

As outlined above, relevant actors within the European digital payments' industry have taken important steps towards interoperability and coordination, aiming to develop a unified European solution with cross-border reach. Cooperation between different private initiatives highlight the dynamism and diversity of national initiatives that have gained traction in their respective markets and are now willing to reach pan-European scale[34]. While the lack of coordination and scale hindered earlier efforts—most notably the European Payments Initiative's initial struggles around 2017—today's landscape is markedly different. The availability of real-time settlement infrastructure, the maturation of SEPA Instant, a more supportive regulatory environment, and a shared geopolitical awareness have created stronger incentives and greater alignment across stakeholders. These initiatives illustrate that, with the right incentives and regulatory support, the private sector is increasingly capable of delivering pan-European solutions that address sovereignty and resilience concerns.

Despite this progress, the current Digital Euro proposal represents a relatively drastic shift from the traditional role of central banks in retail payments (i.e. facilitative role) towards the creation of a comprehensive solution that competes with, rather than complement, private initiatives, especially in standard use cases. This leap has taken place without fully exhausting intermediate policy options such as regulatory sandboxes, coordinated market initiatives, or harmonization of national schemes through common standards. It has also been justified in part by a narrative that the private sector has failed to deliver pan-European solutions over the past two decades. However, this view overlooks the fact that the preconditions for success—particularly regulatory alignment and real-time settlement infrastructure—only began to partially materialize with the launch of TIPS in late 2018 and the progressive rollout of SEPA Instant. Institutional incentives and political momentum at the European level were likewise insufficient until very recently to foster genuine cross-border coordination. These contextual factors are crucial to understanding why a pan-European solution did not emerge earlier, and why such a solution is more feasible today.

To fully support this evolving ecosystem and ensure it scales effectively across borders, the European Commission, together with the European Parliament and the Council, have a critical role to play—not as direct service providers, but as facilitators of convergence. Drawing on their longstanding role in shaping the internal market, our focus should be on enabling innovation through the promotion of interoperability, ensuring consistent regulatory frameworks across Member States, and supporting adoption through targeted incentives and proper regulation and supervision. In this context, the use of public funds should aim to address coordination failures, foster trust, and accelerate market integration, rather than replace or crowd-out private actors already active in the payments space —while remaining grounded in principles of cost-effectiveness.

In this context, the ECB's role should evolve toward that of a neutral enabler. Its key role should concentrate: (i) on supporting the development of technical stand-

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[34] BTW Media. European Mobile Payment Systems Achieve Cross-Border Interoperability. March 5, 2024. https://btw.media/fintech/european-mobile-payment-systems-achieve-cross-border-interoperability/
BNP Paribas. Wero: A New European Instant Payment Solution. Accessed April 30, 2025. https://group.bnpparibas/en/news/wero-a-new-european-instant-payment-solution

ards —where the ECB should act as a leading standard-setter in collaboration with the private sector but refraining to design or develop consumer facing schemes— and, (ii) ensuring the availability of robust infrastructure (such as TIPS), and promoting interoperability among payment systems. This role aligns better with the ECB's institutional mandate and longstanding experience in managing critical financial infrastructure. It allows the Eurosystem to contribute to strategic objectives without assuming functions traditionally held by market actors. None of this implies the ECB should retreat from the digital payments equation; rather, it highlights where its involvement can be most effective—providing foundational infrastructure, ensuring trust, and enabling innovation through collaboration rather than substitution.

Within this collaborative framework, a much-streamlined offline Digital Euro could still provide targeted public value with limited risk to financial stability, citizens' privacy or long-term innovation. ECB´s role on a purely pre-paid (no waterfall) offline digital euro could serve as a complement to cash as a central bank money usable in digital environments. It might also enhance the overall resilience of the payments system. By enabling payments without internet connectivity and protecting user privacy to a degree comparable to physical cash, the offline digital euro addresses unique use cases that the private sector is not currently prioritizing. Moreover, its value becomes even more apparent under conditions of stress—such as cyber incidents, infrastructure failures, or geopolitical disruptions—that could impair online payment systems. Beyond resilience, the offline functionality might contribute to inclusion: if designed with simplicity in mind—through the use of familiar tools such as prepaid cards and secure elements embedded in widely available smartphones—it can bridge gaps for individuals without stable internet access or those with limited digital literacy. Furthermore, by embedding strong privacy guarantees, it could address important public concerns around surveillance and control, thereby reinforcing trust in the monetary system[35]. Importantly, this form of CBDC might not disrupt financial intermediation or market dynamics, as it would operate with clearly defined usage limits and a scope restricted to specific, complementary use cases.

Additionally, wholesale CBDC in Europe can deliver substantial benefits in terms of settlement efficiency, market integration, and strategic autonomy. By enabling T+0 settlement in financial markets, a wholesale CBDC could help reduce counterparty and operational risks, improve liquidity management, and support the development of the Savings and Investment Union. Pilot projects conducted by national central banks—such as those in France and Germany—demonstrate the feasibility of this development. As such, scarce technical resources currently devoted to the Digital Euro should be redirected to this priority.

The ECB's leadership has helped raise awareness of strategic dependencies and

[35] In turn, transaction limits (maximum value transaction limits) currently applicable by Member States should also apply to the offline functionality if these are lower than the general holding limit in order to duly protect the same general interests that justified the limits in the case of cash (e.g. preventing anti-money laundering and terrorism financing or tax evasion)

the need for action. The next step is to channel this momentum towards a model of public-private complementarity, where each actor plays to its strengths. The future of European payments does not lie in institutional overreach or market substitution. This is a call to shape Europe's payment future through shared responsibility, smart coordination, and principled ambition.

Taken together, this approach rests on three mutually reinforcing pillars: (1) a private-sector-led, pan-European payments solution based on commercial bank money and harmonized standards, with the ECB playing a central role in defining the common technical standards that ensure interoperability and resilience across the system; (2) a potentially purpose-driven offline digital euro that acts as a resilient, inclusive, and privacy-respecting complement to cash, with strong potential to address accessibility and continuity-of-service needs across the euro area; and (3) a wholesale CBDC that supports financial market integration and strengthens the euro's international standing. This architecture is not only more aligned with the subsidiarity and proportionality principles of EU law, but also more responsive to user needs and technological developments. This would be all the current Digital Euro proposal is not: avoids the financial stability risks, addresses citizens' privacy concerns with a built-in solution, and incentivizes private investments and long-term innovation in the area of payments. This should be the basis of "Plan A" for the future of Europe's digital payments.

But what if the EU digital payments industry, despite their renewed efforts, fails to provide citizens with a pan-European digital payment solution? We definitely need a contingency plan because our over-reliance and fragmentation in the area of payments is a critical vulnerability and success on the part of the different private sector initiatives -although promising- should not be taken for granted. We might need a "Plan B".

How can we operationalize this lexicographic order in the EU response to the challenges in the area of digital payments? First and foremost, ensuring that the procedure for the eventual issuance decision for a Digital Euro duly incorporates the opinion of the co-legislators and among the precedence conditions to be satisfied is that no private solution with pan-European scale covering the standard use cases is already available in the market at the potential issuance moment. Is the current Digital Euro proposal a basis for such Plan B? If no better alternative is finally achievable, then the several risks and flaws in the current Digital Euro proposal, that we have already discussed, should be mitigated as much as possible:

- Financial stability safeguards need to be not just technically sound but politically resilient.
- The highest levels of privacy safeguarded.
- All the associated costs related to the operation of the new platform and scheme and the custody of the new Digital Euro accounts have to be recovered with no hidden subsidies.
- There should be structural separation of the oversight functions of the Eurosystem over the payments area and its management of the Digital Euro platform.
- The parties liable for consumer protection should be able to implement preven-

tive anti-fraud measures without undue restrictions derived from the technical design of the Digital Euro platform.
- Prior to issuance and testing, pilot projects in all member states should be carried out to detect unintended effects and duly calibrate risks.

Let us hope "Plan B" is finally not needed. This will be a sign that the EU is a thriving economic area where competition and innovation by the payment ecosystem is on the driving seat delivering solutions to the real needs of EU citizens. And with our idiosyncratic market fragmentation and over dependencies solved once and for all, let us enjoy the strategic patience to develop a dynamic, innovative and fit for purpose digital payment ecosystem that will help us promote stability and innovation to the whole economy.

9. DORA AND THIRD-PARTY RISKS: IS THE EU EXTENDING SUPERVISION TO (U.S.) BIG TECH?

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1. INTRODUCTION

During the last decades, financial entities in the European Union have been extensively using services rendered by third parties when conducting their business models. Outsourcing has been widely used in information and communication technologies (ICT), where financial entities have a long history of utilizing third-party services for the development and maintenance of their software, including data applications.

But during the last decade or so the use of the services of cloud computing providers has become more prominent. Financial entities have become dependent on a handful of ICT third-party service providers. The success of financial businesses, like many others, is reliant on their ability to process and manage large swaths of data in real-time to offer the best possible service to their clients. And doing it on a cost-effective basis. It is in this context when financial entities are taking advantage of the massive data-processing capabilities of cloud service providers. While the former may own their own data processing centers, they are increasingly likely to combine them with cloud services.

Moreover, many third-party service providers offer financial entities new software they can use in relations with their customers. This is a key aspect considering the unrelentless progress towards mobile and internet banking, where traditional physical banking channels through branches and direct interaction with customers are taking a back seat.

ICT relevance for financial businesses cannot be overstated, as evidenced by the growing share of intermediaries' overheads that is spent on the development and maintenance of their ICT frameworks. Even when entities require large numbers of IT specialists, they also need the support of specialized service providers, that have the scale and expertise to efficiently render their services to financial entities.

2. DORA: HARMONIZING ICT RISK STANDARDS THROUGHOUT THE FINANCIAL SECTOR BUT ALSO EXPANDING THE REGULATORY PERIMETER

Since the Global Financial Crisis, the prudential requirements applicable to regulated institutions, particularly to banks, have sharply increased, affecting all their activities. Financial institutions are required to operate with much higher levels of capital and liquidity, they are subject to very demanding internal governance and risk management standards, and they are continuously and intrusively inspected and supervised. In parallel with the digitization of financial business, authorities have expanded the regulatory and supervisory standards that address the ICT risks. For instance, they have set detailed and burdensome requirements for ICT risk management, including the use of third-party service providers.

Policymakers in the European Union have also widened the prudential regulatory perimeter. Nowadays, many more typologies of financial institutions are regulated in the European Union. For instance, payment institutions, crypto-services providers or trade repositories are subject to prudential regulation and supervision. And they are subject to rigorous standards on ICT risks.

In this context, the Digital Operational Resilience Act (hereinafter, DORA[1]) has been a new step ahead in expanding the extent and perimeter of prudential regulation. First, by harmonizing the standards on ICT risk management applicable to all EU financial entities, as they were subject to different, not entirely consistent requirements included in a patchwork of European regulations, national laws, European Agency's guidelines or supervisory recommendations. And, secondly, by establishing a new prudential supervisory framework for certain "critical" ICT third-party service providers, based on the extent and scope of their support for the critical or important functions of EU financial entities. It allocates the responsibilities of the new supervisory regime to a "Lead Overseer", one of the three European supervisory agencies (the European Banking Authority (EBA), the European Securities Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA)).

3. HARMONIZATION OF ICT STANDARDS ACROSS THE EUROPEAN FINANCIAL SYSTEM

Financial entities are making more use of the services by third party service providers as part of their ICT model, including those related to cloud computing (third-party risk). Entities that have always been outside of the perimeter for prudential supervision, until now.

[1] Regulation (EU) 2022/2554 of the European Parliament and the Council of 14 December 2022 on digital operational resilience for the financial sector and amending regulations (EC) No 1060/2009, (EU) No 680/2014, (EU) No 909/2014, and (EU) 2016/2011.

Policymakers and supervisors have been focusing on third-party risks for a long time. Authorities seek that regulated institutions, when using third-party services to perform their business, soundly manage their third-party risks. To this end, they have issued standards on third-party risk management, with the overarching goal that the internal controls for outsourced activities are equivalent to those applied to non-outsourced activities by the regulated entity. The regulated entity remains accountable for the outsourced activities, and contracts with third parties must acknowledge the supervisor's ability to access the outsourced activity to maintain adherence to the same prudential oversight regime.

The first milestone in setting outsourcing prudential standards happened in 2006, when EBA's predecessor, CEBS,[2] issued its Guidelines on Outsourcing, evidencing it was a broad-based trend that affected the European banking system,[3] and therefore deserved a European response. Supervisors have long been considering the assessment of third-party risks when reviewing a financial entity's operational risk profile, following the general mandate to assess outsourcing risk as part of the operational risk included in the CRDVI.[4] For instance, the EBA includes the third-party risk assessment in its Supervisory Review and Evaluation Process (SREP) approach,[5] and the European Central Bank (ECB) identifies this risk as one of the key subcategories of operational and ICT risks during its SREP assessment.[6]

But the increasing use of outsourcing, particularly in ICT services, has attracted closer scrutiny by policymakers and supervisors alike. EBA (and EIOPA and ESMA) issued new Guidelines on Outsourcing,[7] including on cloud computing, that set forth reinforced and granular standards on how banks and payment institutions are expected to manage and control their third-party risks[8]. Some of these recommendations have been included in DORA as binding rules. Likewise, the intensive usage that the largest banking groups in the Eurozone has been making of cloud computing services prompted the ECB to issue its own Guide on the use of cloud computing services in 2021.[9] Globally, policymakers and supervisors have also been taking steps towards ensuring closer

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[2] Committee of European Banking Supervisors.

[3] The Guidelines were largely based on the Joint Forum 2005 Outsourcing Guidelines, that set the standards that both financial institutions and supervisors should apply when managing and/or supervising outsourcing. The EBA also consolidated in these Guidelines its Recommendations on outsourcing to cloud service providers (EBA-Rec-2017-003).

[4] Article 85 of Directive 2013/36/EU of the European Parliament and the Council of 26 of June 2013 on the access of activity of credit institutions and the prudential supervision of credit institutions.

[5] EBA Guidelines on common procedures and methodologies for the supervisory review and evaluation process (SREP) and supervisory stress testing under Directive 2013/36/EU (EBA/GL/2022/03).

[6] ECB operational risk methodology for SREP assessment.

[7] EBA Guidelines on outsourcing arrangements (EBA/GL/2019/02), EIOPA Guidelines on outsourcing to cloud service providers (EIOPA-BoS-20-002), ESMA on outsourcing to cloud service providers (ESMA50-164-4285).

[8] Some standards on how banks should govern their risks were also included in the EBA Guidelines on internal governance under CRD (EBA/GL/2021/05), in the last reviewed version.

[9] ECB Guide on outsourcing cloud services to cloud service providers.

supervision of third-party risk management, as evidenced by the consultative document on the topic by the Basel Committee on Banking Supervision.[10]

Addressing third-party risks in operational continuity in resolution has also been a prominent aspect considered by resolution authorities during resolvability assessments.[11] Authorities are requesting banks to insert clauses in their contracts with third-party service providers that ensure they cannot suddenly stop the rendering of the services just because of the resolution or crisis situation of the institution.

DORA can be understood as one further step in the same direction. Many rules set out by DORA were already in force through recommendations, guidelines and other standards for most financial entities. But their relevance comes from their binding nature, as they are set out by European regulation and, therefore, directly applicable to EU financial entities.

4. DORA STANDARDS FOR ICT THIRD-PARTY RISK MANAGEMENT

4.1. BROAD SCOPE

The scope of application of DORA is very broad, as its main goal is to harmonize the standards for management ICT risks across the financial system, covering most financial intermediaries that operate in the European Union.[12] As such, most standards are not necessarily new for banks, insurance companies or securities companies. The rules covering third-party risk management are no exception to this.

It must be noted however that DORA's rules on third-party risk management only cover ICT services. DORA's rules are not directly applicable to other non-ICT third party services, that could be also very relevant in the business model of financial entities, including administrative, payment or other non-ICT services.[13]

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[10] BCBS: Principles for the sound management of third-party risk. Consultative document. July 2024.

[11] Resolution authorities have been recommending banks to map their contracts with third-party service providers, to centralize their contracts with them and insert clauses that ensure that they cannot terminate unilaterally the services provided based on the resolution or crisis of the credit institution. See for instance, Single Resolution Board Operational guidance for operational continuity in resolution (November 2021). The guidelines were updated in January 2025.

[12] Article 2 of DORA includes a broad number of entities within its scope. They do not only include banks, payment institutions, investment entities, or insurance and reinsurance companies, but also other supervised entities in the European Union, such as credit rating agencies, or crypto-asset service providers, or the administrators of critical benchmarks.

[13] The guidelines or rules on outsourcing are applicable to the third-party provision of non-ICT services. For instance, banks and payment entities in the European Union are subject to the EBA Guidelines on Outsourcing.

4.2. GOVERNANCE REQUIREMENTS

DORA prescribes demanding governance and risk control requirements applicable to the outsourcing of ICT services. Beyond the general governance standards applicable for ICT risk management,[14] DORA requires financial entities to adopt and regularly update a strategy on ICT third-party risk, where they may consider a multi-vendor strategy. The strategy should consider the use of ICT third party service provider (TPSP) for supporting the performance of critical or important functions.[15] DORA seeks to ensure that the decision to use third-party services for ICT services is reasoned and thoroughly assessed, after fully considering its risks and benefits.

Financial entities should keep a comprehensive register of all their contractual arrangements with third party service providers for ICT services, distinguishing among those that support critical or important functions and those that do not. Financial entities should annually report to the relevant competent authority their new arrangements for ICT risks, including those that have been amended during the exercise. DORA seeks to ensure that financial entities store all relevant information in a centralized manner, so it can be easily controlled and monitored by them and by their supervisors. This is even more important in a context where financial institutions, when complex and sophisticated, may have hundreds, if not thousands, of relevant contracts with dozens of service providers.

4.3. PRE-OUTSOURCING PROCESS

Financial entities are in principle free to decide whether to outsource or not their ICT services, including when the outsourcing affects or can affect the provision of critical or important services.[16] They are "only" required to apply sound standards and procedures before agreeing to any ICT outsourcing. Entities should assess the nature

[14] Article 5 of DORA.

[15] Critical or important functions are defined as a function, the disruption of which would materially impair the financial performance of a financial entity, or the soundness or continuity of its services and activities, or the discontinued, defective or failed performance of that function would materially impair the continuing compliance of a financial entity with the conditions and obligations of its authorization, or with its other obligations under applicable financial services law. The definition of critical and important functions is aligned with the rules on banking resolution.

[16] A regulatory model whereby financial entities are required to request an authorization prior to any ICT outsourcing will not be desirable, as it has many shortcomings. First, financial entities may have hundreds of contracts with services providers, and therefore supervisors may need to have very large structures just to manage the file applications from supervised entities. The sheer number of applications may even put into question the ability of supervisor to process in time the applications. As a result, supervised entities may face significant delays, financial innovation may be curtailed for regulated institutions. Second, an authorization regime may create a false complacency on financial entities and service providers alike, as a supervisor's authorization may likely to be perceived as a "seal of approval" of the services provider.

of the activity to be outsourced (including whether it is a critical or important function) and conduct thorough due diligence on the service provider as part of the selection and review process. The vendor due diligence should check whether the third-party has the means to provide the agreed service under the agreed circumstances. The financial entity should also verify that the contractual standards include and meet all the legal and supervisory requirements, assess the risks that may stem from the contracts and identify any conflicts of interest arising from them.

4.4. INTERNAL CONTROLS

Financial entities shall determine the frequency of the audits and inspections, including the areas to be audited. DORA is very demanding with the involvement of the financial entity's internal audit services in the review of ICT risks. For all the outsourced services, financial entities must guarantee that the contracts enable the access of the entity, including the internal audit services, to the premises, information, and data managed by the service provider in relation to the services that are rendered to the financial entity.

4.5. CONTRACTUAL DOCUMENTATION

DORA[17] regulates the content that financial entities should insert in their contracts with service providers, prescribing the minimum contents of the clauses that the written contracts where ICT outsourcing are formalized should contain, including the service level agreements. Among other aspects, the law requires financial entities to include in the contract clauses that require the TPSP to cooperate with the supervisor and the resolution authority, termination rights in favor of the financial entity, and those that thoroughly regulate the location where the service is provided and include rigorous provisions on data security.

4.6. TERMINATION RIGHTS

Financial entities should insert clauses in their contracts that enable them to early terminate the contracts upon certain conditions. Entities[18] should be entitled to terminate the contract if the TPSP has breached the applicable contractual, legal or regulatory provisions, if a material change affecting the service provider has affected its capacity

[17] Article 30 of DORA.

[18] The inclusion of termination rights in the contracts is not new for banks and payment institutions. The section 13.4 of the EBA Guidelines on Outsourcing recommend entities to include clauses allowing the possibility to terminate the arrangement upon essentially the same circumstances foreseen by DORA.

to continue delivering the service, if the service provider has material weaknesses in its overall ICT risk management and particularly if its unable to ensure sound data authenticity, availability, integrity and confidentiality standards. Financial entities should also have the right to terminate the contract if the supervisor does not have the ability to effectively oversee the outsourced service.

4.7. REINFORCED STANDARDS FOR TPSP SUPPORTING CRITICAL OR IMPORTANT SERVICES

DORA[19] requires financial entities to apply more rigorous standards when employing service providers that support critical or important services. These standards cover three dimensions: (i) the requirement to define exit strategies for each individual contract, addressing the so-called lock-in risk (ii) the comprehensive assessment of concentration risks prior to deciding on outsourcing, and (iii) rules that prescribe in more detail the content of the contracts.

First, EU financial entities should define exit strategies for contracts supporting critical or important services and include contractual clauses that enable them to early terminate them. The exit strategies must be granular and contemplate mitigating actions to guarantee the quick replacement of the service provider. These contingency plans are not a novelty, as they were already recommended for banks and payment institutions by the EBA in its guidelines.[20]

Financial entities should assess the concentration risk that they may incur when outsourcing part of its critical or important functions to ICT TPSP. They must weigh whether they are exposed to high levels of concentration risk in one service provider or to closely linked service providers. Financial entities should define and implement, when appropriate, strategies to mitigate the concentration risk to ICT TPSP, to ensure that their ability to provide services and conduct their business model is not curtailed by any problems affecting the services provider.

Requesting financial entities to assess concentration risk with ICT TPSP is hardly something new. For instance, the ECB, in its Guide on cloud computing, recommends banks to go beyond assessing concentration risk prior to the decision to outsource, and continuously measuring this risk during the outsourcing lifetime. The ECB also expects that banks assess other concentration dimensions beyond single name, including the geographical location or deriving from a specific functionality or service. The EBA guidelines also recommend entities to assess the concentration risks associated with outsourcing.[21]

Financial entities must also include additional clauses in their contracts with service

[19] Article 28(8) for exit strategies, article 29 for assessing concentration risks prior to outsourcing article 30(3) for the additional information included in contracts.

[20] Section 15 of the EBA Guidelines on Outsourcing.

[21] Paragraph 66 of the EBA Guidelines on Outsourcing.

providers that support the provision of critical or important services. Beyond the inclusion of further detailed information on the services to be provided, financial entities must insert in their contracts the following clauses:

- Transition periods linked to exit strategies. Transition periods seek to ensure that the provision of services is not suddenly interrupted by the TPSP when the financial entity decides to early terminate the contract. If that were to be the case, financial entities may be unable to exercise their termination rights in the contract, for fear of being unable to continue their operations (lock-in risk). Through sufficiently long transition periods[22] financial entities will be able to reintegrate the service in-house or replace the service provider in due time without affecting the performance of the service provided. This is very important, considering that many contracts with ICT TPSP are either difficult or impossible to replace.[23]

- The obligation of the service provider to participate and fully cooperate in the financial entity threat-led penetration test (TLPTs). These tests are a new requirement by DORA;[24] financial entities must engage "ethical hackers" to identify any vulnerabilities that can leave the entity exposed to risks to its operational continuity. These exercises must be undertaken at least every three years. With an increasing proportion of critical or important functions being reliant on ICT TPSP, together with the evidence that many cyber-attacks are exploiting financial entities' vulnerabilities by focusing on accessing the institution systems' through TPSP, the participation of service providers in these tests seems essential.[25] Financial entities are also expected to assess the risks related to the use of complex sub-outsourcing chains that can leave the financial entity unable to control the outsourced service.

- The inclusion in the contract of provisions that ensure full cooperation, including access rights, of the financial entity (including its audit services) and, particularly, of the supervisor, including the relevant competent authority and the Lead Overseer (see below). The inclusion of these clauses is expected to operate

[22] The law does not define the length of the transition period that financial entities must include in their contracts. Therefore, it is expected that it will be defined through the common practice.

[23] Banks and payments institutions were already recommended to include transition periods in their contracts. The paragraph 99 of the EBA Guidelines on Outsourcing recommends entities to set appropriate transition periods, and the obligation of the service provider to continue supporting the entity in the event of the termination of the outsourcing agreement.

[24] Articles 26 and 27 of DORA.

[25] See ECB IT and cybersecurity risk- key observations in 2024. The report pointed out to sharp increase in ransomware attacks on service providers, although it also indicates that none of the attacks resulted in a critical impact.

as an enabler for the new prudential oversight regime for "critical" ICT service providers.

5. NEW OVERSIGHT REGIME FOR TPSP

Besides from ensuring that financial entities apply sound standards to their outsourced activities, the legislator is aware that the concentration of the financial system in a few service providers can have systemic consequences. A failure of a relevant third-party service provider can result in multiple, interrelated impacts in the operational resilience of the European financial system or large parts of it, including entities belonging to different financial subsectors. In other words, an ICT TPSP that is suddenly unable to continue operating may trigger the inability or impaired ability of different banks, insurance companies, payment institutions, etc. to continue serving their retail and corporate clients.

In response, the European Union has adopted a policy seeking to expand the prudential supervision perimeter beyond financial organizations, covering unregulated ICT TPSPs that provide services to the former. The European Union considers that imposing requirements to financial entities on ICT third-party risk management may not be enough to address the risks that these entities pose to the continuity of critical services in the financial system. And therefore, a prudential authority must step in to directly oversee the activities of the ICT TPSP.

The regime is largely unprecedented. It articulates an architecture for the supervision for critical third-party service providers that gives European authorities ample powers to consistently review the operations of these entities that they use to render services to EU financial institutions. The framework creates obligations for TPSP to submit information, surrender to onsite or offsite inspections and responds to the recommendations issued by the relevant European authorities. This framework goes well beyond the existent regime in the United States, where the Bank Services Companies Act (BCSA)[26] enables certain supervisory authorities[27] to review the services provided by third-parties to banks.[28]

[26] A Law enacted in 1962 that facilitated the provision of services, not necessarily ICT, by TPSP to banks. The law has been subsequently amended in 1982, and is only applicable to services provided by third-parties to banks. The Act requires banks to apply the same standards to their outsourced activities to those that have not been outsourced.

[27] The Federal Reserve, the Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency.

[28] There are material differences between the European (DORA) and American (BSCA) frameworks. First, the scope of BSCA covers only banks (not even all deposit-taking entities in the US), whereas DORA covers most financial institutions in the EU. The covered services by DORA are exclusively ICT, whereas BSCA's scope is broader, covering mainly all services rendered by third-parties to banks, including others such as payment or lending services. But BSCA covers in principle more service providers than DORA, as it includes ICT and non-ICT services and does not restrict the supervision to only "critical" TPSP. Second, a

Having discussed the rationale of the regime, different questions of the new European regime shall be answered. Which ICT TPSPs will be subject to the oversight regime? Who will be the lead supervisor of these entities? Which powers does the lead supervisor have? How should the powers over institutions that are based in third countries outside of the European Union be exercised?

5.1. WHICH ENTITIES CAN FALL WITHIN THE NEW SUPERVISORY PERIMETER?

An ICT TPSP designation as critical is the basis for being subject to the new oversight regime. But not all service providers that render ICT services to EU financial entities will be deemed critical. Not even all those that support EU financial entities in the provision of critical or important services will be critical. The "criticality" label is therefore a rather selected category, a "grand cru" standard that is reserved only to those service providers that can have "systemic" effects in the European Union due to their interconnections with financial entities.[29] The European Supervisory Agencies (ESAs), in the context of the Joint Forum, will be responsible for identifying these critical entities, a task they have already started. The first list of critical service providers is expected to be published during 2025 by the Joint Forum.[30]

Three features characterized the new supervisory framework: (i) its paneuropean dimension, as the rationale of the new oversight regime is the existence of entities that

critical difference is that enforcement provisions are very clear in DORA, whereas in BSCA are lacking, what significantly weakens the position of the supervisors, as makes oversight dependent on an entity willingness to cooperate. Third, DORA includes provisions that ensure that the public can know which are the critical third-party service providers that are subject to the oversight regime, as they will be disclosed, whereas BSCA does not include any provision on disclosing these elements. Overall, DORA is a much more ambitious approach than BSCA, as formalizes how the supervision of critical ICT services providers is expected to work, and creates prudential obligations for these entities.BSCA is a much less complete framework, where the powers of the supervisors are not underpinned by obligations of TPSPs.

[29] Indeed, this system may have some common features with the framework for designating systemically important institutions in the European Union. Designation is the key first step towards the application of a reinforced regulatory and supervisory framework. This risk-based approach intends to ensure that there is proportionality embedded in the new regime, the framework will only be expectedly applicable to a few, large and powerful service providers that may have the means and scale to meet the supervisory requirements and recommendations.

[30] Although the list is yet to be published, the ECB has published some aggregated data on ICT service providers to significant institutions that can give some hints on the process for the criticality designation. During the 2024 Outsourcing Register, the ECB concluded that around 50 percent of the total budget for critical services of significant institutions in the Eurozone was allocated to the top 20 TPSP. 90 percent of the total budget is allocated to top 300 service providers. It can be inferred from the data that banks in the Eurozone exhibit a large concentration in a few ICT TPSP, and that therefore this offers a blueprint for the identification of critical service providers. In the same vein, the report also identifies that most significant institutions are using third party cloud services, and identifies the top 6 cloud service providers (Microsoft, Amazon.com, Google LLC, Salesforce, Oracle Corporation and IBM Corporation).

can create systemic risks for the whole European Union, (ii) its cross-sectorial features, as critical TPSP provide services to a broad range of financial entities operating in diverse sectors and (iii) its collegiate nature, as many authorities (from different sectors, and from European and national levels) will be represented in the new joint examination teams supporting the deployment of the new powers of the Lead Overseer.

How and when this designation will happen are key questions hovering over the heads of many ICT service providers in the European Union. DORA[31] outlines several criteria that the ESAs should consider when assessing the criticality of TPSPs; only service providers that can have a serious impact on the EU financial stability will be identified as critical, based on the following criteria:

- The systemic impact on stability, continuity or quality in the provision of financial services if the ICT TPSP faces a large-scale operational failure. Authorities should consider the number of served financial entities and their total assets, to gauge the possible impact of the TPSPs on the operational resilience of the affected financial entities.

- The systemic relevance of the financial entities relying on the services provided by the ICT TPSP, by factoring in the number of global or domestic systemically important institutions served by the relevant entity. The law mandates ESAs to go beyond just measuring the size of the potentially directly affected financial entities and identify also the secondary impacts from the interconnections between these systemically important institutions and other financial entities to which they are subsequently rendering their services to.

- The reliance on the TPSP by financial entities for performing their critical or important services. In principle, if TPSP supports the provision of non-critical, non-important services, a sudden operational interruption of the service provider activities cannot trigger any significant impact on the citizens and corporates of the EU economy.

- The substitutability of the ICT TPSP, by gauging the availability of any realistic alternative providers. Authorities must consider whether there are service providers that can render comparable or similar services, and the complexities of the contract or services rendered, that can adversely affect their substitutability. Moreover, authorities should also assess that the ability to replace a TPSP may be affected by the difficulties migrating the relevant data to another service provider, due to either the high costs or the high operational risks involved in the migration (high switching costs). The limited substitutability of certain ICT TPSP is a well-known fact, especially for certain services, such as cloud computing.[32]

[31] Article 31 (2) of DORA.

[32] For instance, the banks surveyed by the ECB considered that less than 20 percent of their critical and

To avoid any regulatory arbitrage, the law requires the ESAs to conduct the assessment at group level, by considering together all the services that these TPSPs render to EU financial entities.[33]

The inclusion criteria are complemented by several exclusions of ICT TPSP which will not be subject to the prudential supervision framework. For instance the framework will not be applicable to supervised entities, either financial or non-financial, since their activities are already supervised.[34] The provision of intragroup services is also disregarded for these purposes. Finally, if the ICT TPSP provides services exclusively to financial entities that are only active in a Member State, the service provider will not be identified as critical, as their activities cannot raise paneuropean concerns.

DORA requires ICT TPSP considered "critical" to have at least one subsidiary in the European Union to render services to EU financial entities. This is a relevant requirement, as many large ICT TPSP are headquartered in third countries and may not have a direct subsidiary in the single market.[35] This rule evidences European Union's willingness to exert closer control on third-country critical TPSP.

DORA also foresees the possibility for an ICT TPSP to voluntarily request to be identified as critical, by submitting its application to one ESA. Despite its potential costs, some service providers might see the oversight framework as advantageous. Being listed as critical can make a provider appear safer behind clients and more relevant than other competitors not on the list, especially since the law mandates publishing the names of critical ICT TPSPs. Considering the current context, the possibility of a service provider willingly submitting to an administrative supervisory framework seems rather far-fetched.

5.2. ONE OF THE ESAS AS THE LEAD OVERSEER: A PRIMUS INTER PARES

The oversight regime for critical ICT TPSP is a collegiate, cooperative and essentially paneuropean undertaking. DORA determines that one of the ESAs (EBA, EIOPA or ESMA) should be appointed as "Lead Overseer",[36] effectively a *primus inter pares*.[37]

external contracts with third party service providers will be easy to substitute, with less than 10 percent being impossible to substitute. In 2022, the ECB singled out the six most relevant providers of cloud computing services, reflecting a low expected substitutability.

[33] Article 32(3) of DORA.

[34] For instance, a bank that provides software-as-a-service to other financial institutions will not be eligible as a critical TPSP, as it is already subject to a prudential supervisory framework that ensures that it manages the ICT risks relevant for the provision of services to any other financial entity.

[35] The rule does not explicitly require that the EU financial entity can only enter a contract with the EU subsidiary, nonetheless. It may therefore be possible that a critical TPSP to render services to an EU financial entity through a non-EU legal entity, if it has established a subsidiary in the EU.

[36] It is not the first time that the EU choses to allocate the responsibility of supervising financial institutions to ESAs. For instance, ESMA is responsible for the supervision of credit rating agencies, or trade repositories, for instance. The spirit is that issues with a European dimension require a European response.

[37] This is one of the key differences with the US BCSA, that confers inspection powers to three regulators

The designation is based on the total amount of the assets of the financial entities to which the services of the critical TPSP are rendered, broken down by sector (banking, insurance, or securities).[38] The chosen metric, in view of the larger size of the banking sector in the European Union makes the EBA the likely winning horse in the race to take over the leading role in the oversight of many of the critical TPSP across the European Union.[39]

The identification of critical ICT TPSP and other activities related to the prudential supervision regime will be undertaken in the Oversight Forum, a sub-committee of the Joint Forum. The Forum will have a harmonization mandate, to ensure the consistency of the emerging practices in the supervision of ICT TPSP. Its membership will be broad, with representatives from both European and national authorities involved in the oversight framework.

The Lead Overseer's main responsibility is assessing whether the critical ICT TPSP has in place comprehensive, sound and effective rules, procedures, mechanisms and arrangements to manage the ICT risk it may pose to European financial entities. The law clarifies that the assessment shall focus mainly on the services rendered by the ICT TPSP that support the performance of critical or important services by EU financial entities.[40] Based on this assessment, the Lead Overseer will prepare a draft oversight plan outlining the activities it intends to perform for the supervision of the critical ICT TPSP, that will be shared with the affected service provider.

5.3. POWERS OF THE LEAD OVERSEER

DORA gives the Lead Overseer relatively broad powers for supervising critical service providers. The oversight framework does not require critical TPSP to be licensed, and therefore a third-party service provider does not need to undergo any authorization process before starting the provision of critical or important services to a financial entity in the European Union. Nor will its directors or senior managers be required to be subject to a fit and proper assessment. In other words, providing critical services to

but fails to organize how supervision is expected to work, which significantly weakens supervisors' position and makes them contingent on the service provider willingness to cooperate.

[38] For instance, if the cumulative total assets of the served credit institutions are larger than the assets of insurance companies and securities entities, the EBA will be designated as the Lead Overseer.

[39] The criteria resemble the framework for identifying a lead supervisor of a financial conglomerate, in accordance with the Financial Conglomerates Directive (FICOD). Unlike a financial conglomerate, in the new supervisory framework there is no "parent entity", and therefore the criteria are only based on the size of the largest sector to which the TPSP provides services.

[40] DORA clarifies the aspects where the Lead Overseer should consider in its assessment of the critical ICT TPSP. Among others, the Lead Overseer will be expected to assess the requirements to ensure the availability, continuity, scalability and quality of services provided to financial entities, the physical security contributing to ensuring ICT security, the risk management processes, or the ability to identify, monitor and report any material ICT-related incidents and cyber-attacks, the governance arrangements, etc.

a regulated entity in the European Union is not a reserved activity, but it may trigger some prudential supervision. DORA gives the Lead Overseer information and inspection powers.

The Lead Overseer can request information and documents to the critical ICT TPSP including relevant business or operational documents, contracts, policies, etc. It will be able to examine records, data, procedures and any other material relevant to the execution of its responsibilities, obtain documents, including copies from the relevant materials by banks, or summon the representatives of the critical ICT TPSP. Moreover, the authority will be able to conduct onsite inspections on any business premises of the service provider.

The Lead Overseer will be assisted by a joint examination team to conduct inspections and other supervisory actions, in a structure that seems inspired by the Single Supervisory Mechanism's joint supervisory teams.[41] These teams will be set up individually for each critical ICT TPSP; there might be as many joint examination teams as supervised critical entities, each one with a different composition.

The composition of the joint examination team[42] will reflect, to the extent possible, the footprint of the critical service provider and of the financial entities served by it, seeking to combine and leverage the European and national expertise. It will be made up of representatives from the ESAs, the competent authorities for the supervision of the financial entities served by the ICT TPSP, and even a representative from the competent authority from the country where the service provider is established (on a voluntary basis). The joint examination team should have the expertise required to conduct the oversight of the ICT TPSP, particularly on ICT and operational risks. Considering that dozens, if not hundreds, of financial entities in the EU may be served by some large ICT TPSPs (particularly in cloud computing), the ESAs may need to cap the size of the joint examination team, as otherwise it can easily become unmanageable.

In the event of a critical ICT TPSP not complying with the recommendations or doing it unsatisfactorily[43] after receiving the requirement, the Lead Overseer may be able to impose serious sanctions on it. The Lead Overseer can apply a periodic penalty pay-

[41] The joint supervisory teams (JST) are made up of representatives from the ECB and from the local supervisory authorities from the countries in the Eurozone where the group operates. These structures leverage on the local knowledge and resources of the local authorities to ensure the effective supervision of significant institutions in the Eurozone.

[42] Joint draft Regulatory Technical Standards on the criteria for determining the composition of the joint examination team (JET), not yet applicable.

[43] The only punishable offenses by a critical ICT TPSP will be to fail to deliver the information or documentation required, failing to cooperate with the Lead Overseer during the general examinations or inspections, and failing to respond to the recommendations of the Lead Overseer or doing it so in an unsatisfying manner. The critical service provider will not be required to comply with the Lead Overseer's recommendations, as they are of a non-binding nature. Nevertheless, failing to comply with a supervisor's recommendations is rarely an option for a supervised entity, and even more when, in case of non-complying, the supervisor will disclose this fact publicly and may even result in a requirement to the financial entities that use its services to suspend or even terminate the services.

ment on the critical service provider. This fine will be imposed daily until compliance is achieved, but it will be capped to six months. The payment may be up to 1 percent of the daily worldwide turnover[44] of the critical ICT TPSP, potentially a very high amount that seeks to ensure that the service providers have legal incentives to cooperate with the Lead Overseer, and that the reflects these entities' global scale.[45] DORA also includes the requirement[46] to the Lead Overseer to disclose the periodic penalty, in a "name and shame" scheme.[47]

Power to issue recommendations. DORA gives the Lead Overseer the power to issue recommendations on certain areas of activity of the critical ICT TPSP, which may affect how it provides the ICT services that support critical or important services of financial entities. The Lead Overseer may recommend the use of specific ICT security and quality requirements or processes, or conditions and terms under which the critical ICT TPSP provide ICT services to financial entities.

The focus on subcontracting is notable due to potential risks it poses to financial entities receiving ICT services. The Lead Overseer may also issue recommendations to the critical service provider on refraining from entering into a further subcontracting agreement in cases where subcontracting may involve critical or important functions to the financial entities and the subcontracting party is located in a third country and the arrangement poses a clear and serious risk to the financial stability of the Union or to the served financial entities. Therefore, to limit the public intervention regime to the minimum possible the Lead Overseer can only issue recommendations for very specific topics under very determined circumstances.

The recommendations issued by the Lead Overseer do not have a binding nature; a critical ICT TPSP may decide to ignore them. Nonetheless, DORA contains different mechanisms of "moral suasion", that would compel the critical ICT TPSP to comply with the supervisory recommendations. First, the critical servicer will need to notify within 60 calendar days of its intention to follow the recommendations or the reasons

[44] The reference to the worldwide turnover of the critical service provider intends to ensure the relevance of the penalties. Many large ICT companies that provide services to the European financial entities are headquartered in third countries and only a fraction of their turnover comes from the European Union. For instance, the ECB in its outsourcing registry of 2024, has identified that significant institutions in the Eurozone has significant dependencies with many service providers (ICT and non-ICT) headquartered in the United Kingdom (53 significant institutions), USA (46), China (23), or India (16).

[45] Article 35(8) of DORA lays down the criteria that the Lead Overseer should use when graduating the periodic penalty payment against the critical ICT service provider. Among other aspects, it should assess the gravity and duration of the non-compliance, whether the non-compliance was committed intentionally or negligently, and the level of cooperation of the services provider. Article 35(9) states that the amount of the periodic penalty payments will be allocated to the general budget of the European Union.

[46] DORA does not include, however, other sanctions that are usually applicable to supervised entities or their managers. A critical service provider cannot have its license revoked, as it does not have one. There is no accountability framework for the administrators or the senior managers of the affected banks, as there is no fit and proper regime applicable to them.

[47]Article 35(10) of DORA, that also recognizes that if the disclosure can jeopardize the financial markets or cause disproportionate impact to the parties involved, the Lead Overseer may decide against disclosure.

for not doing so.[48] Second, the Lead Overseer must disclose to the public if the critical ICT TPSP does not notify the supervisor within the required period, or when the explanations provided by the entity to not follow the recommendations have not been deemed sufficient by the supervisor. This disclosure is intended to work as a mechanism to pressure the service provider into complying with the recommendations. Third, DORA also foresees that as a last resort, and after having received the assessment by the Lead Overseer, the competent authority[49] (for instance, the banking supervisor for a bank) can force the financial entity to temporarily suspend or to terminate the use of the services of the ICT TPSP. This will be close to a "nuclear option" by the Lead Overseer and by the banking supervisor and may have huge business and reputational effects for the third-party service provider.[50]

5.4. *EXERCISE OF THE SUPERVISORY POWERS IN THIRD COUNTRIES*

DORA also enables the Lead Overseer to exercise its powers (mainly information requirements and the power to conduct general investigations and inspections) outside of the European Union, on a subsidiarity basis when the objectives of the supervision regime cannot be achieved by applying them to the European subsidiary critical TPSP. To implement its powers in a third country, the law requires the explicit consent of the critical ICT TPSP, the notification to the relevant competent authority in the third country and be justified by the inability to achieve the desired outcome by applying the powers to the EU subsidiary of the TPSP. It is not clear whether the critical TPSP and the relevant authorities in the third country would authorize an inspection or any other supervisory activity in the service provider's premises in that country. The Lead Overseer might be compelled to conduct its supervisory activities in a third country if, for instance, if the TPSP manages or processes data using in that country.

5.5. *WHO WILL PAY THE COSTS OF SUPERVISION?*

As DORA lays out a new regime for the prudential supervision of critical ICT TPSP, a relevant question is how the costs incurred by the authorities in charge of supervision will be funded. The exercise of the new supervisory powers will result in human and

[48] Failing to communicate the willingness to comply or the reasons for not complying may be considered a breach of the obligations required by DORA to the critical third-party servicer and therefore may result in a penalty against the entity.

[49] The reference to the competent authority instead of the Lead Overseer is explained by the lack of power of the latter with regard to regulated financial entities. As the Lead Overseer does not have any enforcement powers over a financial entity, the restriction or mandate should be enforced by the financial entity's competent authority.

[50] DORA has not given the Lead Overseer the power to force the TPSP to terminate the contract with the relevant financial entity.

technical costs by the relevant authorities (mainly but not limited to ESAs). DORA has clarified the financing model by imposing the costs of supervision directly on critical ICT TPSP.

6. CONCLUSIONS

DORA toolkit for addressing the micro and macro impacts of ICT third-party risks may give the European authorities the required comfort that there are good chances that their recommendations will be followed by the critical ICT TPSP. Nonetheless, the oversight framework is new and unprecedented; and its main elements must be tested. For instance, the ESAs are yet to make the first designation of critical providers,[51] and therefore nowadays there is still significant uncertainty about which third parties may end up falling within the new supervisory perimeter. Similarly, there are still unresolved issues regarding the organization of prudential supervision. How will supervision focus solely on services to financial entities without impacting third-party providers' services to other clients? How will the Lead Overseer manage the supervision of these complex groups involving close interconnections of large number of legal entities? How will the composition of the joint examination teams be?

In any case, European financial entities may have yet another source of regulatory costs that other international competitors-notably financial entities from the United States of America are not subject to. When it comes to the provision of ICT TPSP, EU financial entities will incur significant costs related to the amendment of contracts, the maintenance of a centralized register with all the data points for the covered contracts, etc. They may also face an increase in their operating costs, as TPSP may pass the costs of compliance through them. Depending on how ESAs decide to use their newly granted powers, EU financial entities may face higher costs linked to their operational models, that can affect their competitiveness in international markets and, in some cases, may also dent their ability to innovate.

[51] Although they have already started the information collection process required to identify the critical third-party service providers in 2024, with a view of making the first designation by 2025.

GLOSSARY

ABS	Asset-Backed Securities
AIReF	Spain's independent Fiscal Authority
ALMPs	Active Labor Market Policies
AMC	Asset Management Companies
AML/CFT	Anti-Money Laundering/Combating the Financing of Terrorism
APP	Asset Purchase Programme
AT	Additional Tier
ATM	Automated Teller Machine
BCBS	Basel Committee on Banking Supervision
BdE	Banco de España
BIS	Bank of International Settlements
BLS	Bank Lending Survey
BRRD	Bank Recovery and Resolution Directive
BTFP	Bank Term Funding Program
CA	Comprehensive Assessment
CAP	Common Agriculture Policy
CB	Central Bank
CBAM	Carbon Border Adjustment Mechanism
CBBP3	Third Covered Bonds Purchase Program
CBDC	Central Bank Digital Currencies
CBR	Combined Buffer Requirement
CCyB	Countercyclical Capital Buffer
CDP	Carbon Disclosure Project
CECL	Current Expected Credit Loss
CESEE	Central, Eastern and Southeastern Europe

CFC	Central Fiscal Capacity
CFSP	Common Foreign and Security Policy
CMBS	Commercial mortgage-backed securities
CMDI	Crisis Management and Deposit Insurance
CMU	Capital Markets Union
CNMV	Coision Nacional del Mercado de Valores, Spanish Securities and Exchange Commission
COM	Communication from the Commission
CPFF	Commercial Paper Funding Facility
CRD	Capital Requirement Directive
CRE	Commercial Real Estate
CRR	Capital Requirement Regulation
CSDP	Common Security and Defense Policy
CSPP	Corporate Sector Purchase Program
DAC	Development Assistance Committee
DIF	Deposit Insurance Fund
DFR	Deposit Facility Rate
DGSD	Deposit Guarantee Scheme Directive
DLT	Distributed Ledger Technology
DMA	Digital Markets Act
DORA	Digital Operational Resilience Act
DSA	Debt Sustainability Analysis
EA	Euro Area
EBA	European Banking Authority
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECB	European Central Bank
ECFR	European Council of Foreign Relations
ECL	Expected Credit Loss
EDC	European Defense Comunity
EDF	European Defence Fund
EDIS	European Deposit Insurance Scheme
EDP	Excesive Deficit Procedure
EEA	European Economic Area
EFB	The European Fiscal Board
EFTA	European Free Trade Association
EIB	European Investment Bank

EMU	European Monetary Union
EP	European Parlament
ERDF	European Regional Development Fund
ERTEs	Spanish Temporary Support Work Schemes
ESBR	European Systemic Risk Board
ESCB	European System of Central Banks
ESFS	European System of Financial Supervision
ESM	European Stability Mechanism
ESMA	European Securities and Markets Authority
ETS	Emissions Trading System
EU	European Union
EUBS	European Unemployement Benefit Schemes
EUC	EU Council
EUTEGSF	EU Technical Expert Group on Sustainable Finance
FAQs	Frequently asked questions
FDI	Foreign Direct Investment
FDIC	Federal Deposit Insurance Corporation
FHLB	Federal Home Loan Banks
FOLTF	Failing or likely to fail
FOMC's	Federal Open Market Committee
FRTB	Fundamental Review of the Trading Book
FSB	Financial Stability Board
FSI	Financial Stability Institute
GACS	Italian Securitization Scheme for non-performing loans
GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
GFANZ	Glasgow Finance Alliance for Net-Zero
GFC	Great Financial Crisis
GHG	Greenhouse-gas
GNI	Gross National Income
G-SIBs	Globally Systemically Important Banks
HICP	Harmonized Index of Consumer Prices
HQLA	High-quality liquid assets
HRVP	High Representative and Vice-President of the Commission for Foreign and Security Policy
ICO	Instituto de Crédito Oficial
ICT	Information and Communications Technology

IEA	International Energy Agency
IFIs	Independent Fiscal Institutions
IFRS9	International Financial Reporting Standards
ILO	International Labour Organization
IMF	International Monetary Fund
IRA	Inflation Reduction ACT
KRE	Bank Regional Index
KYC	Know Your Customer
LCR	The Liquidity Coverage Ratio
LCT	Least Cost Test
LLM	Large Language Models
LSE	London School of Economics
LTROs	Longer-term Refinancing Operations (LTROs)
MDA	Maximum Distributable Amount
MDBs	Multilateral Development Banks
MFF	Multiannual Financial Framework
MIP	Macroeconomic Imbalances Procedure
MMT	Modern Monetary Theory
MREL	Minimum requerimente for own funds and elegible liabilities
MRO	Main Refinancing Operations
MRR	Minimum Reserve Requirements
MS	Member State of the European Union
MTBF	Medium Term Budgetary Framework
MTFs	Multilateral Trading Facilities
MTO	Medium-Term Budget Objetive
MTPs	Medium-Term Fises Structural Plans
N2O	Nitrous Oxide
NCWO	No creditor worse off
NFCs	Non-Financial Corporations
NGEU	Next Generation European Union
NGFS	The Network of Central Banks and Supervisors for Greening the Financial System
NIR	Negative Interest Rates
NNRPs	National Recovery and Resilience Plans
NPEs	Non-performing exposures
NPLs	Non-performing loans
NRP	National Reform Program

NSP/NCP	National Stability /Convergence Programs
NZBA	Net-Zero Banking Alliance
ODA	Official Development Assistance
OSA	Open Strategic Autonomy
PBOC	People's Bank of China
PD	Probaibility of default
PELTROs	Pandemic Emergency Longer-term Refinancing Operations
PEPP	Pandemic Emergency Purchase Program
PFCs	Perfluorcarbons
PMI	Purchase Managers Index
PRA	Prudential Regulation Authority
PRTR	Spanish Recovery, Transformation and Resilience Plan
PSPs	Payment Service Providers
QE	Quantitative easing
QT	Quantitative Tightening
R&D	Research and Development
REACT-EU	Recovey Assistance for cohesion and the territories of Europe
RMBS	Residencial Mortgage-Backed Securities
RRF	Recovery and Resilience Facility
RRP	Recovery and Resilience Plans
RRP	Recovery and Resilience Program
RTSE	Regulatory treatment of sovereing exposures
RWAs	Risk-weighted assets
SARS	Severe acute respiratory syndrome
SBBS	Sovereing bond-backed securities
SGP	Stability and Growth Pact
SIB	Systemic risk buffer
SIV	Savings and Investment Union
SME	Small and Medium-sized Enterprise
SRB	Singel Resolution Board
SREP	ECB´s Supervisory Review and Evaluation Process
SRF	Single Resolution Fund
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism
SURE	Support to mitigate Unemployment Risks in an Emergency
SVB	Silicon Valley Bank
TCFD	Task Force on Climate-related Financial Disclosures

TEU	Treaty on European Union
TFEU	Treat of Functioning of the European Union
TLTRO	Targeted Longer-term Refinancing Operations
TPSP	Third-Party Service Providers
TTC	US-EU Trade and Technology Council
UNCTAD	United Nations Conference on Trade and Development
UTP	Unlikely To Pay
VAT	Value Added Tax
WEU	Western European Union
WTO	World Trade Organization