THE EURO IN 2023

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THE UNION IN A FRAGMENTED WORLD
A yearbook on the Euro 2023

Edited by
Fernando Fernández Méndez de Andés

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FOREWORD

Fundación ICO and Instituto Español de Analistas jointly decided in 2012 to publish an annual review of the Euro, the Yearbook, with the aim of expanding knowledge and raising awareness of the single currency, and suggesting 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.

The report we are presenting now, the tenth in the collection, is titled *The Union in a fragmented world. A Yearbook on the Euro 2023*. It contains nine chapters, split into three different parts after an introduction on the political landscape: (i) Issues in Monetary Policy; (ii) Issues in Fiscal Policy, and (iii) Issues in Regulation.

The publication includes an initial chapter questioning the political implications of a Union at war. Fractured is the word used to define the current state of the world and the world economy runs the risk of fracturing into two isolated blocs, causing lasting changes in trade flows, technological exchanges, supply of commodities, migration, and financial flows. The role of Europe in this bipolar world is unclear, it is concluded.

The first section on monetary policy opens with an article about the ECB´s new monetary policy strategy in the current high-inflation environment. It then explains why the unique and incomplete structure of the Euro Area brings significant risks and challenges to monetary policy. The last contribution in this section looks at the functioning of the banking industry in the Euro area, its profitability and solvency. A crucial issue to anticipate the depth and length of a potential recession.

The second section is about fiscal policy and starts with a description and evaluation of the reform of the European Union fiscal rules, published in November. The following article addresses the most significant example of European fiscal policy, a forward-looking assessment of NextGenerationEU in Spain. And finally, it includes an article calling for the normalization of European fiscal policy, to adapt it to the new inflationary environment.

The final section discusses the two regulatory priorities and challenges for the financial system of the Eurozone: (i) the need to coordinate internationally and without further delay the regulation of the fast-growing crypto asset markets, and (ii) the implications of the unilateral use of financial regulation to accelerate the greening of finances and the economy in Europe.

The report includes, as it is customary, an executive summary that presents a critical analysis of the different contributions and, as this is the tenth edition, it remembers and highlights the ten main contributions to the European Monetary Union debate made by this Yearbook through its ten editions.

We continue to believe that it is necessary to explain 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. This is the task assumed throughout this report with the goal 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 would like to express our gratitude to each of them and congratulate them on a job well done.

Instituto Español de Analistas and Fundación ICO are confident that the Euro Yearbook 2023 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 — Fundación ICO

AN EXECUTIVE SUMMARY

Fernando Fernández[1]

1. THE UNION IN A CHANGING ECONOMY: GLOBAL TRENDS AND BLACK SWANS

This is the tenth edition of the Yearbook, and I was hoping to celebrate it with an issue dedicated to the success of the European Monetary Union. But just when the Covid pandemic seemed to be under control and the world was finally entering a beautiful cycle of economic growth, high employment, and moderate inflation, Russia invaded Ukraine, the world reverted to geopolitically defined blocks, and Europe once again confronted war within its boundaries. Political priorities shifted dramatically and the state of the economy, and the completion of monetary union were pushed to the back seat. It was all about winning the war, defending our territory and our values, helping our friends, and maintaining unity. We would worry about the economic consequences later. And so changed this Yearbook, consequently.

The European policy response to this most unexpected challenge has been a remarkable success. Europe maintained its unity and delivered a strong message to Putin, with their words and deeds. The Union will not back down on its commitments. European citizens seemed willing and determined to assume the economic and social costs, including a complete embargo of Russian oil and gas. If the price of the war is a recession, we will endure a winter of misery. Once again, Europe is being forged in a crisis because all Member states value highly the security and stability the Union provides, at a surprisingly low cost.

[1] Fernando Fernández Méndez de Andés is professor of Economics and Finance and international consultant. He has been editor of the Yearbook since the first edition and of the two previous thematic reports on the Euro.

This will not, however, be a short war, and maintaining resilience and unity will become the top priority. It will be increasingly difficult, as Europe struggles to build a common energy policy and a single defense and security package, while advancing in improving its fiscal framework and maintaining financial stability and avoiding fragmentation. Because this war is a very asymmetric shock to the Union, with very different impact on the economies and societies in Member states. Asymmetric in terms of energy dependence on Russia, there are countries that relied almost 90% on Russian imports for their energy balance, in their exposure to huge flows of immigrants fleeing the war, thus questioning its welfare systems and absorption capacity, in the challenges of a faster decarbonization to their economic model and sectoral specialization, and in their initial fiscal room and credibility in financial markets.

There is a new line of fragmentation in Europe with the Ukrainian crisis. It runs east-west more than the traditional north-south divide. Winners and losers, in relative terms obviously, are not the usual suspects anymore, and so will need to be donor and recipient' countries. Solidarity flows, rescue packages, funds availability, and regional bias in defining policies will gradually shift with the new threats and priorities. And, as time goes by and the war lingers in the west, all these differences will come to the fore complicating consensus and policy making. This is the new European challenge, and it will forge a new Union.

With this idea in mind, with the need to rebuild some of the foundations of the European Union, this Yearbook focusses on the specific challenges and opportunities for the Monetary Union. It assesses policies in the much narrow area of fiscal, monetary, and prudential policies. But because it is the tenth edition, we thought appropriate to start by giving some context, to briefly consider a long-term perspective of the major trends in the world economy. The economic order was changing before the invasion and these structural trends will continue with and after the war. It is worth thinking how the war may affect expected outcomes.

Six are the long-term trends shaping the global economy. Globalization, digitalization, delocalization of employment and teleworking, decarbonization, population aging and other demography trends, and inequality. Globalization peaked before the Great Financial Crisis and has been increasingly questioned ever since. Fortunately, it has proven unstoppable. Global trade slumped hard in the pandemic year of 2020 but then rebounded briskly in early 2021 onwards, to the point that shipping indices showed global container throughput at an all-time high in September 2022.[2] At the same time, there has been a significant shift in the composition of trade, a shift that has important implications for the role of Europe. Trade in goods has increased only modestly, while trade in digitally delivered services has nearly doubled. We have entered a different globalization phase, that of services, data, ideas, and intangibles. And therefore, a new type of trade conflicts will become the norm, especially since technical and political consensus on how to deal with trade in services is much weaker. With increasing globalization, the temptation to manage it has emerged. Interestingly, more so in

[2] See WTO, World Trade Statistics Review 2022.

advanced countries that do not benefit so much anymore once emerging economies have proven very successful at exploiting an open international economy. The pandemic brought along serious disruptions in global supply chains, disruptions that have remained because of China´s obsession with its failed zero-covid policy. Consequently, economists and policy makers have discovered *near-shoring*, a nice word for relocation policies for industries and jobs. While the merits of diversifying the supplier's base are paramount, the difficulties and costs of bringing manufacturing back to advanced economies should not be minimized. The lack of a large enough labor force in the prime age group being one of them.[3]

More recently, the war in Ukraine has made *friendly shoring* popular, a euphemism for relocating production in political allies, in reliable countries. But countries change political alliances suddenly and unpredictably, let us not forget that the distribution of natural resources does not follow political reliable lines. Moreover, the concept of reliability runs contrary to the very idea of Europe. The Union was built around the belief, and the empirical evidence, that countries that trade together tend to be less contentious, more friendly to each other; interdependence not only brings economic growth but also political stability and global peace. We should not forget this fundamental European lesson in the current turbulent times, not in relation to Russia nor to any other potential enemy.

The digital revolution has proven deeply disruptive in production, employment, and financial markets. And delivered the expected cyclical Malthusian response: the claim to stop technological change because it brings job losses and relative decay. It follows a predictable rule, almost a Kondratieff long cycle. But it will not happen. If politically successful in certain world regions, it will only relocate change to other geographies. We may be suffering something of that sort already in Europe. The concern is understandable, because technology will certainly improve our standard of living as a society, but also increases the feelings of uncertainty and vulnerability. The damage is very easy identifiable, we know what jobs will disappear, and this time they are white-collar relatively qualified jobs, the repetitive content of which technology can now easily automate, replicate, and substitute.

The benefits are, however, subject to three fundamental uncertainties. Many of the new jobs are hard to imagine, the skills necessary for them may well be beyond the reach of the displaced worker, and certainly many new jobs will not be created in the same locations where the jobs have been destroyed, not even in the same country. Digitalization, like globalization, brings new winners and losers. And it will require active policies that protect the workers, not their current jobs. Jobs will go, the challenge is to train and prepare workers to be able to occupy the new job openings. Many economists demand a new social contract. Particularly in Europe, where confidence in the capacity of governments to deliver social goods runs high. I would rather stress the need to balance competitiveness and social protection and emphasize the risks of missing this

[3] See Donna S. Rothstein of the US Bureau of Labor Statistics, *Male prime-age nonworkers: evidence from the NLSY97*, Monthly Labor Review, December 2020.

new industrial revolution. Protectionism, *Fortress Europe*, is always a temptation, but it is never a good idea. Strategic autonomy is the new mantra, but economist should remain vigilant that it does not slip into old style protectionism and crony-capitalism.

The digital revolution also brings about the globalization of employment. An increasing number of people in semi-qualified jobs can now decide where to live, since the technology has disassociated the work from the job place. In a similar fashion, home working has become possible for many occupations. But the costs of homeworking should not be ignored; questions about its effect on productivity are pervasive and it is essentially inegalitarian since home working conspires against the uneducated, the young and newcomers into the labor market, and the women statistically dominant in the personal services sector. Moreover, labor relations are changing as the new technologies and social preferences gradually move workers away from being wage earners towards self-employment. Europe stands to benefit from all these changes, its social model being a powerful attraction, but high income taxes and a heavy regulatory burden work against it. Competitiveness in attracting talent, human capital, has always been one key characteristic of a thriving economy and a successful society.

Europe has made the fight against climate change a primary political priority, although its actions do not always follow its words. It has become world champion in introducing emission pricing, carbon adjustment taxes and tariffs, green finance, and green prudential regulation. But decarbonization is not the first energy transition. The previous ones have unfolded over long periods of time, and they have mostly been energy additions rather than substitutions.[4] Nevertheless, Europe seems determined that the current climate-driven energy transition happens very fast, coal is to disappear in less than a quarter century, gasoline powered cars in approximately the same time frame. And it is meant to be transformative, the European Union anticipates that hydrogen will provide over 20% of its total energy by 2050. Hydrogen provides less than 2% today.

Ambitious goals do not necessarily make good policies. Specially since the energy transition faces four major challenges which will require extremely good politics. First, energy security, ensuring adequate supply at a reasonable cost, will require new forms of international coordination. Witness the difficulties delaying a common European energy policy. Moreover, although the recent COP26 in Egypt was able to reach a lose agreement for a transition fund to help finance decarbonization in emerging and developing nations, a lot of work remains to be done in international coordination to ensure fairness, legitimacy, and efficiency. Second, the macroeconomic impact of decarbonization needs to be addressed beyond wishful thinking. It is finally becoming evident that the green transition is inflationary and contractionary, at least in the short term. Third, decarbonization will require massive amounts of public and private funds. Funding that will not only deteriorate public finances buy may be a major force behind the increase

[4] In the six decades since oil overtook coal as the world's number one energy source, the global consumption of coal had almost tripled. See Daniel Yergin, *Bumps in the Green Transition*, Finance and Development, IMF, December 2022 edition

in the natural rate of interest. And fourth, the energy transition is dependent on the massive supply of a range of new minerals. Technological improvements in mining, international agreement on acceptable mining emissions and universal, undisrupted, access to these resources, are mandatory for a successful energy transition.

Demography also plays an important role in shaping the new economic order. Four major demographic trends need to be addressed, all of them have considerable economic implications: (i) population aging, which questions not only public finances but the future of productivity, and brings forward lasting changes in the average consumption package of a given population; (ii) migrations, a particular structural challenge for Europe given demand factors, its low fertility rates, and supply facts, the extreme economic and social cliff effect on its borders; (iii) feminization of the labor force that also leads to the feminization of consumption and the distribution of income; and (iv) urbanization that conditions the structure of energy demand and supply and requires strengthened transportation systems.

While these major structural forces were changing the economy and the world we live in, three *black swans* fell upon us in about a decade. Black swans, as everybody knows by now, are extremely rare events with a very low probability of occurrence but a huge economic and social impact if indeed they happen. And they happened, three of them in our time: the great financial crisis, GFC, a pandemic, covid19, and now war in Europe.

The GFC turned into a fiscal and balance of payments crisis in Europe, into a typical emerging markets debt crisis. A crisis of the euro that we have described at length in this Yearbook, whose first edition was commissioned precisely to shed some light into it. The euro crisis (i) questioned financial liberalization; (ii), enlarged the role and responsibilities of central banks to encompass financial stability and provide them with a new tool kit including unconventional monetary policies; (iii) precipitated an expansion of public debt beyond the usual play of automatic stabilizers to, among other reasons, isolate households, and their private savings from the collapse of the banking industry and reestablish the flow of credit; and most importantly, (iv) forced the Union to address a major drawback in its design, the lack of a banking union. The GFC delivered the Single Supervision and Resolution Mechanisms. A radical necessary institutional change that, honestly, could hardly have been imagined without the extent and depth of the euro crisis.

When the Euro Area was starting to recover from the GFC, the pandemic struck the continent causing the largest fall in GDP ever in peace times. The Union reacted promptly and swiftly and brought about two extraordinary structural shifts in Europe. First, a European fiscal response to a systemic event, the pandemic, a common European fiscal policy, NGEU, was possible, including a stabilization fund financed with European debt. A fund that is still far from being the macro stabilization facility the Union needs, but more likely a one-time quasi structural fund. But a fund that sets a very important precedent for European policies. Secondly, Covid 19 also increased the demand for protection and security and enlarged the role of all governments across Europe, justifying a growing interventionism in the economy and elsewhere, including restrictions to fundamental freedoms and in the four sacred liberties of the EU. Many of us hoped that this large and more active role of governments would cease with the control of the pandemic. We would never know because, certainly, the Russian invasion of Ukraine did not let it happen.

The war in Ukraine has made everyone aware of the need for a European security and defense policy, including a significant increase in defense budgets, and of the potential benefits of coordinating industrial and defense policies. Brexit and most significantly the Russian aggression in Ukraine, have dispelled many lingering concerns about the benefits of an EU membership. Never has the Union seemed more justified. And it has never showed itself more united in its response. To the point that it could be safely argued that the European Union has not only weathered but has strengthened itself after the invasion. But challenges remain, and real issues need to be addressed as the passing of time will only increase the asymmetric nature of the war and the energy crisis.

Politically, the Ukrainian war has resulted in rising populism and nationalism. Economically, in inflation and stagnation, and most likely a recession, hopefully brief and shallow. It is still too early to tell whether we are entering a new economic era or simply a different, recessionary, phase of a normal economic cycle. All economic projections have systematically revised growth downwards and inflation up and lasting longer.[5] The macro situation calls for very different fiscal and monetary policies than the endless expansion of the last decade. We simply cannot afford expansionary policies any more without risking a major turmoil in financial markets, but also because the economic situation requires anti-inflationary, demand policies.

However, in the complexities of today's world, "apparently simple solutions can have significant unintended consequences and policy trade-offs must be taken into account."[6] One of this populistic responses, one apparent simple solution, is to restrict trade. The war is inducing widespread temptations to restrict exports of essential commodities, energy, and food, resulting in politically motivated commodities markets, justified politically in the need of strategic autonomy or intelligent retaliation. This is to me the main danger of the current war-induced recession, that international trade and globalization fall hostage to mercantilism, to extended and inefficient war economic policies that damage the main source of specialization and growth, and of global coexistence, and leave deep scars in potential growth.

As it is often the case in European policy making, the three major crises discussed above have resulted in a better Union, in significant improvements in the institutional design of the Monetary Union. The ECB has moved decisively to become a normal central bank. After Draghi's famous" "whatever it takes", it has created (OMT, the Outright Monetary Transaction) and improved (TPI, the Transmission Protection Instrument) a lender of last resort facility; it has adopted nonconventional monetary policies and

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[5] The latest revision, ECB projections after the December 15th meeting of the Governing Council, as we were sending this Yearbook to print.

[6] Bruegel Policy Brief, *A European policy mix to address food insecurity linked to Russia's war*, Georg Zachmann Pauline Weil and Stephan von Cramon-Taubade, December 2022

started its withdrawal when no longer necessary; and it has developed ample tools to manage liquidity at various maturities, the different vintages of LTRO, Long Term Refinancing Operations. This process of normalization has not been without costs, the risks to its autonomy and the danger of fiscal dominance being the most significant ones, together with a certain alienation of Germany, the main shareholder. Ultimately, the ECB is still conditioned by a unique characteristic among major central banks, its inability to conduct monetary policy with its own "Treasuries", a Euro-wide asset, and not with sovereign bonds of the different Member states. A "state of nature" that complicates policy making and leads to structural financial instability and volatility.

These crises also precipitated completing monetary union with a much-needed banking union, a feature that had been explicitly rejected at the time of Maastricht Treaty but that proofed essential to avoid financial fragmentation and a vicious banking-sovereign risk loop threatening a potential breakup of the euro. The introduction of the Single Rule Book in 2009, of the Single Supervisory Mechanism in 2014 and the Single Resolution Mechanism and Fund in 2016 are major roadblocks in that direction. But significant improvements in risk sharing, the European Deposit Insurance System, and in risk reduction (limiting sovereign exposure in bank's balance sheets) are still lingering, awaiting the political green light. Progress towards a full capital markets union has also been significant and described elsewhere in the Yearbook

Nevertheless, recent developments in prudential and regulatory policies are worrisome. As the heads of the three European banking authorities have written jointly in an unprecedented blog, "the ongoing legislative discussions in the EU Council and the European Parliament on the EU banking package, (…building in a Commission proposal that already weakened capital commitments adopted in Basel III) is seriously deviating from the international standards. The ECB and the European Banking Authority (EBA) have consistently argued for a full, timely and faithful implementation of Basel III. The rules have been carefully articulated to ensure a worldwide minimum safety net against the plethora of risks that we painfully experienced during the global financial crisis."[7] Once again, national protectionism in the form of regulatory forbearance and disguised as EU strategic autonomy, threatens to leave Europe outside the international financial regulatory system and to position internationally active European banks at a competitive disadvantage. Furthermore, the European claim to act as the standard-setter of the world, and its commitment to rule-based world order is at stake.

Progress in fiscal union has been understandably much slower, despite the many initiatives and even small Treaty changes adopted this decade. The political discussion on fiscal rules had just started at the time this book was being completed, with the Commission proposal, dated November 9th. The subsequent debate on adopting a macro stabilization fund for the Union is contingent on a successful implementation of the Next

[7] *Strong rules, strong banks: let's stick to our commitments*, Blog post by José Manuel Campa, Chairperson of the European Banking Authority, Luis de Guindos, Vice-President of the ECB and Andrea Enria, Chair of the Supervisory Board of the ECB, 4 November 2022.

https://www.ecb.europa.eu/press/blog/date/2022/html/ecb.blog221104~34240c3770.en.html

Generation EU program. A political reality that is contaminating the deployment of NGEU, weakening de facto its conditionality, and curtailing its capacity to steer national economic policies, and at the same time blurring the nature of a stabilization fund with useless and even counterproductive structural obligations. While also impeding a much-needed serious debate on fiscal credibility and discipline and particularly on how to enforce it in a Monetary Union. A contentious political point, the Commission barely touches upon. Finally, the crisis management tool is largely unfinished, with the European Stability Mechanism, ESM, still being a multinational institution outside the Union, and requiring unanimity for its activation. Let us hope the Union does not need to improvise and accelerate this instrument in the current juncture, because the ECB should not be expected to act as the unconditioned safety net of the Union.

As discussed in the previous edition of the Yearbook[8], the EU response to the pandemic had been swift and resolute. It consisted mainly in demand management, expansionary fiscal and monetary policies unprecedented in its magnitude, ambition, timeliness, and coordination. But no major institutional changes were adopted or even considered. Certainly, the fiscal effort has been almost brutal, adding around twenty percentage points to the average European debt to GDP ratio. The deployment of SURE and NGEU set an important precedent for the Union: global challenges require global solutions. The full capacity of the European taxpayer, and its ability to borrow in financial markets can and should be leveraged if need be. To conclude that if that was true in a pandemic, it must also be true in war, would be a simplistic solution, though. Because the Russian invasion of Ukraine has ushered in a new economic environment and brought about significant new restrictions.

The war has brought a recession, but most significantly for a monetary union, it has brought high and persistent inflation, way above policy makers' expectation and citizens' tolerance. EMU will not survive if it fails to deliver low and stable inflation, a precondition for its existence. The inflation anchor is the building block of the European Monetary Union, much more so than in any previous monetary union. Unquestionably, inflation has risen much higher and for much longer than anticipated. The current peak has been excessive and needs to be reverted in the Euro area, for the sake of the Union, its credibility, legitimacy, and survival. The discussion about the transitory nature of this inflationary surge has lasted too long and has morphed into a senseless debate on good and bad inflation, on supply and demand inflation. As if inflation were not, at the end, always a monetary phenomenon that required contractionary policies. As if central banks were somehow morally obliged to sit through episodes of supply shocks so as not to limit temporary growth. As if inflation expectations were so rational that social agents would voluntarily assume permanent wealth losses. Basic economic ideas I would have thought we had all learned in the sixties regardless of ideological and political biases.

There are many possible reasons for this tardiness in reckoning the regimen change. Inertia mentality and adaptative expectations clouded judgement by all decision mak-

[8] See The Euro in 2022, Executive Summary, *Good Policies, a Gap Year in Reforms.*

ers. A certain obsession with structural deflation after a long and painful struggle to raise inflation expectations. Understated difficulties in modelling structural changes hidden in a long period of stability. Unwillingness to confront the inflationary consequence of the energy transition fearing that it would stop the fight against climate change. Excessive confidence in the firepower of traditional anti-inflationary policies if the need arose. Inability to grasp the inflationary consequences of reverting or even managing globalization. A monetary illusion with technological change and the digital revolution that reverberated throughout financial markets.

In any case, in closing 2022, monetary authorities all over the world have veered course radically. And the talk of normalizing interest rates that was dominant throughout the year has been replaced by a clear message of restrictive policies and positive real rates for a long period. Tightening financial conditions is now the rule because, although monetary policy can't resolve pandemic-related bottlenecks nor war disruptions in commodities markets, it needs to curtail aggregate demand to address increasing demand-related inflationary pressures and rising inflationary expectations, before it is too late, before inflation becomes entrenched in Europe. As a recent IMF blogpost summarizes, "Central banks must act resolutely to bring inflation back to target and avoid a de-anchoring of inflation expectations, which would damage their credibility. Clear communication about policy decisions, commitment to price stability, and the need for further tightening will be crucial to preserve credibility and avoid market volatility." [9]

But monetary policy cannot do it alone, it needs the collaboration of fiscal policies. And, if 2023 Member states' budgets are to be taken seriously, it is not yet clear that governments in Europe have understood the new situation. Many governments are simply relying on inflation and nominal growth to mechanically reduce debt and deficit ratios while continuing to run expansionary fiscal policies. As the Commission wrote in its opinion on fiscal policies in the Euro area, "in the current climate, a broad-based fiscal expansion to support demand would further fuel inflationary pressure, at a time when public debt is elevated in several euro area Member States. This calls for fiscal policies that are appropriately differentiated … It also requires governments to be prepared to adjust current spending to the evolving situation".[10] In sum, in the current inflationary cycle, except for the NGEU funds, fiscal policy needs to shift urgently to a restrictive mode, while maintaining some temporary support measures, carefully targeted to support the most vulnerable people and companies.

The need for restrictive monetary and fiscal policies underlines the role of supply side policies at this inflationary juncture. To minimize the output costs of reducing inflation, competition policies, deepening the single European markets for goods, services, innovation and R&D policies, deregulation and red tape simplification, competitive tax

[9] Tobias Adrian, *Interest Rate Increases, Volatile Markets Signal Rising Financial Stability Risks,* IMF Blogpost, October 2022, https://www.imf.org/en/Blogs/Articles/2022/10/11/interest-rate-increases-volatile-markets-signal-rising-financial-stability-risks

[10] Council Recommendation on the economic policy of the euro area, COM (2022) 782 final, Strasbourg, November 22, 2022. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=COM:2022:782:FIN

environments and SME policies that foster growth and productivity, become fundamental ingredients of the adequate policy mix. European policies in this area have at best a mixed record since there are usually mostly focused on leveling up national frameworks. A basic reorientation towards competitiveness and productivity is mandatory, if the Union is to avoid a large contractionary outcome of the current inflationary cycle.

In closing this section, allow me to offer my personal account of the major successes and drawbacks of monetary union in 2022. Clearly, maintaining unity has been the great achievement, but that in itself speaks poorly of the Union. Zooming in in the basic areas of our interest, on monetary policy, the ECB took too long but it has finally dispelled all fears of fiscal dominance or political dependence and has come around to confront inflation forcefully. The European monetary authority has made public its unwavering commitment to restrictive monetary policies for as long as necessary, both in terms of interest rate and balance sheet policies. It is my concern that financial markets are still too optimistic about the end point of interest rates in the Euro area, hoping still for the repo rate not to exceed 3%, and about the speed and intensity of the quantitative tightening, as evidenced by the only relative success of both windows of opportunity opened by the ECB for the devolution of TLTROs in 2022. On the other hand, the Union has not moved an inch to complete the financial architecture, with no news on EDIS, the deposit insurance system, the crisis resolution facility, or the euro safe asset.

Also, this year, the monetary authority has improved its facility to prevent financial fragmentation through the adoption of the Transmission Protection Instrument, TPI. This tool calls for unlimited ECB intervention in time and quantity in cases of speculative attacks, unwarranted by economic fundamentals, increasing risk spreads in the cost of sovereign financing. The ECB insists on maintaining discretion as to the exact nature of the circumstances that would warrant its intervention and about the conditions attached. It is understandable that the ECB stresses to avoid the stigma effect associated to TPI predecessor, the OMTs. But it is also necessary that ECB action does not operate, or is even perceived to operate, as a free bailout of governments following irresponsible policies. There is a large degree of uncertainty and major disagreements over the nature of the macroeconomic conditions, i.e., the exact definition of debt sustainability used by the ECB and its comparability with judgements made by the Commission or the IMF, and over the likelihood and content of accompanying corrective measures to be undertaken by governments under these speculative attacks.[11]

The Union is overly confident on its existing architecture to combat potential fragmentation, "the euro area's institutional framework has showed time and again that it can address the risk of market tensions, reduce volatility, ensure sovereigns' market access, and thereby help in various ways to safeguard financial stability in the entire

[11] For a very critical review of TPI, see for example Luis Garicano, *The ECB's new backstop introduces atrocious incentives,* Financial Times, September 21, 2022,

https://www.ft.com/content/e06f253d-5f06-4484-9ce0-658434a844cd euro area both against domestic and external shocks" [12] This confidence is unwarranted. There is too much uncertainty and discretion over the use of the existing toolkit. And uncertainty is not good for the effectiveness of TPI and ESM, the credibility of the ECB and the stability of the European Monetary Union. Waiting for a first time for the ECB to be tested, does not seem particularly wise under the current cycle of increasing interest rates and political risk.

Turning to fiscal policy, nothing significant other than NGEU has happened this year, consolidating the belief that this an area of conflict avoidance, and thus continuous disappointment. The deployment of NGEU has been marred by growing doubts about the speed of funds to reach the real economy, the actual transformative power of the fund to increase potential growth, and by the excessive willingness of the Commission to ensure success by weakening surveillance and enforcement of the agreed targets and reforms. The debate on fiscal rules has only started with the introduction of the Commission proposal at the end of the year, and judging by the initial reactions, no breakthrough appears to have been reached. And the extension of the moratoria on the Stability and Growth Pact deficit and debt criteria, cannot be considered satisfactory given the need of fiscal policy to be deflationary. In sum, none of the three criteria for the European fiscal policy underlined by Commissioner Gentiloni in his speech,[13] have been met. It has not helped bringing down inflation, nor it has been focused on the most vulnerable, but it has abused of across-the-board hand-outs, and too often it has not used but ignored price signals.

In sum, we must conclude as we did last year, that in the recent crises, be it Covid19 or the Russian invasion, the Union has proven much better in responding with money than in delivering meaningful reform and institutional change. It is tempting to attribute this inability to insufficient leadership, but the reasons run much deeper. They should be traced to the Great Divide in the Union that this Yearbook has been underlining for 10 years. A divide that has prevented institutional change for way too long. Only the Great Financial Crisis, a deep and long recession, forced banking union. And even in this arcane area, once financial markets calmed, the reform drive stopped. War at the border of the Union has so far only provoked insistent calls for more money, more aid programs, a larger EU budget, more euro public goods to be delivered centrally. But none of these will make the Monetary Union stronger, more stable, reliable, and permanent without institutional change and Treaty reforms. We have argued consistently for this reform if the Union is to address its fundamental weakness. Otherwise, it will continue to be at the mercy of financial markets, investors capricious preferences, and repeated episodes of fragmentation and emerging market-like crisis.

[12] ESM WP55-2022, Robert Blotevogel, Gergely Hudecz and Elisabetta Vangelista, *Asset purchases and sovereign risk premia in the euro area during the pandemic,* https://www.esm.europa.eu/publications/asset-purchases-and-sovereign-risk-premia-euro-area-during-pandemic

[13] See the speech by Commissioner Gentiloni at the European Policy Centre: *Reforming EU economic governance for the coming decade,* November 2022,

https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_22_7166

2. BUILDING A RESILIENT UNION WHILE HESITATING TO COMPLETE ITS ARCHITECTURE

This Yearbook has always been a collective effort. And once again I have been fortunate to assemble an impressive number of excellent colleagues, that from their diverse background, perspectives, and positions, share their understanding of the Monetary Union and provide the reader with the *state of the art*, with an updated account of what has happened in the Union, in terms of monetary, fiscal, and regulatory policies. But, most importantly, they also provide the *state of the debate*, the current thinking in the academia and policy makers about what to do, what needs to be changed and what to be preserved, what will change soon and what would take longer. This year, because of the institutional challenges faced by the Union itself, the list of contributors is slightly skewed towards officials from authorities; a deliberate bias somewhat offset by giving voice to a new generation of Europeans.

Their excellent contributions leave a unanimous sense of satisfaction and concern. Satisfaction because the Union rose to the challenge, responded promptly, and displayed a strong sense of unity. This resolve should not be underestimated because, once again, it has proven wrong all those doomsayers that fail to understand the fundamental moral and political commitment that binds Europe together. But it should not lead to complacency either, because the Great Divide in the Union remains. As we wrote last year, "Every step towards the definition of one European policy in any area, reopens the debate between the federalist and the skeptics, between those politically motivated to create the European ethos and those who are simply driven by results and insist on subsidiarity as a founding block for a Union of sovereign states. …[And] the real debates have been postponed, precisely because we have not moved any closer towards a new consensus and the two opposite visions of a monetary union remain well stablished in their respective corners, politically and geographically."[14] We have clearly witnessed this divide in 2022, and it has prevented the Union from building a common energy policy, advancing towards a common refugee policy, committing to a common defense policy. And in the narrower field of monetary and fiscal policy this existential divide is responsible for the remaining gaps in the institutional architecture of the monetary union, despite the overwhelming consensus in the academia and the increasing impatience in financial markets.

Given our understanding of the Union as a political process, the 2023 yearbook includes an initial chapter questioning the political implications of a Union at war. Thereafter, the book is organized in the three traditional areas of policy relevant to our work (monetary, fiscal, and regulatory). Part I, on monetary policy, assesses the working of the revised ECB strategy to fight high and sustained inflation, when it was conceived at the time of structural deflation; provides four examples of the limitations of the current framework for a smooth and successful functioning of the ECB; and concludes with the outlook for the banking industry, in the understanding that this time it will help avoid a

[14] The Euro in 2022, Executive Summary, pag.14

deep and prolonged European recession. Part II addresses the three basic issues for an European fiscal policy: the reform of the European fiscal rules, given the consensus on their obscureness, discretionality and inability to prevent irresponsible behavior; the questions and concerns over the deployment of the European Resilience and Recovery Fund, probably the most celebrated European initiative since the launching of the euro; and the need for a substantial reorientation of national and European fiscal policies to complement monetary policy in curbing inflation and thus minimizing the depth of the necessary output loss. Finally, Part III sheds some interesting insights into the two regulatory financial priorities of the union: how to foster innovation in digital finances while protecting the less informed of its potential users and guaranteeing financial stability, and how to develop green finances and enlarge the role of the financial sector in bringing about the energy transition while ensuring stability and an abundant flow of credit without putting the European financial industry at a competitive disadvantage.

In chapter 1, María Martínez, a journalist covering the European economy for major networks write on *The Opportunities for a stronger EU with war on European soil.* Fractured is the word she uses to define the current state of the world. Globalization has created dependence and weakness in conflict. In the Ukrainian war, Russia has weaponized energy and food, while the West has weaponized its control of the economic and financial system. The world economy runs the risk of fracturing into two blocs centred on the U.S. and on China, causing lasting changes in trade flows, technological exchanges, supply of commodities, migration, and financial flows. The role of Europe in this bipolar world is unclear, she concludes. The EU ability to remain a relevant geopolitical actor rests in the capacity to adopt common policies in time. This crisis has shown that the decision-making process needs to be reconsidered.

In a rapid reaction to the invasion of Ukraine, EU Member states (i) mobilised over €19 billion in financial, humanitarian, emergency, and budget support to Ukraine; (ii) adopted eight packages of sanctions against Russia; and (ii) have received 7 million Ukrainian refugees fleeing from the invasion. “This wasn’t just an attack to a neighboring country. It was also an attack to the EU, … a war on our energy, a war on our economy, a war on our values and a war on our future”. But this war also provides an opportunity for the European Union to show its usefulness, to gain legitimacy through its responsiveness to the needs of citizens. Next year will be challenging for Europeans, but a year of opportunity for European politics, an opportunity to show the relevance of the Union. The Eurobarometer gives a very clear picture of the top three strategic priorities of European politics: the economy, energy and defence. Accordingly, this chapter focusses on these three policy areas.

On the economy, the war has put an abrupt end to all discussions on temporary inflation. Central banks around the world face see a possible recession justified as a short-term pain to gain the battle against inflation. If a recession is imminent, Maria Martínez questions what national governments and the EU could do to support the economy and to shield businesses and consumers. Certainly, they cannot continue their fiscal expansion, spending by Eurozone governments is expected to reach 51% of the region’s economic output in 2022 and public debt is at historic highs.

Within the EU, the bulk of measures to protect households and business have been financed at the national level and with significant disparity of design. Germany tops the list in terms of euros made available, while France ranks high on price regulation measures. This fragmentation of fiscal policies is a clear weakness for the EU. It highlighted the European fiscal problem, how to design a fiscal framework that offers those Member states that do not have room for manoeuvre the possibility of supporting their industries and businesses without precipitating another sovereign debt crisis in Europe, while preserving the ability of those who can.

Energy has largely gone unrecognized as an important cause of the geopolitical and economic fault lines at work. The EU has a foreign energy dependency problem that has always constrained its capacity as a global power. In this crisis, it has become a major weakness as the EU has struggle to build a common energy policy in an emergency. The Commission adopted the Repower EU Plan in May. Countries agreed to (i) voluntarily reduce demand for natural gas by 15%, (ii) set out plans to cut demand for electricity by at least 10% over the winter months, (iii) diversify energy supplies and secure record levels of import of liquefied natural gas (LNG) and higher deliveries of pipeline gas. The Commission has also proposed a plan for setting up joint purchases of gas. The EU will also introduce (i) a cap on the extra revenues of companies that produce electricity at a low cost, (ii) a temporary tax on the "surplus profits" of fossil fuel companies, (iii) an emergency price cap on the prices of natural gas. The details of most of these agreements are still to be negotiated, leading to a sense of failure. In the author's own words, the inescapable headline is "European Union energy ministers failed to reach an agreement."

Russia' invasion of Ukraine could be an opportunity to accelerate the transition to cleaner energies, a public good commonly shared by 87% of EU citizens. But this transition will be a long journey and the citizens need responses in a short-term clouded by two threats to energy security: the risk of rationing, a worst-case scenario for which detailed contingency plans are needed, and the risk of substituting Russian dependency for a dependency on other countries also prone to instability and with equally poor human rights record.

The final section of this chapter is dedicated to security and defence policies. Europe lacks the military capabilities to guarantee its own security or serve as a capable partner for NATO. The EU has underinvested in defence for decades. The EU has provided €2.5 billion of military assistance to Ukrainian armed forces, the U.S. $17.6 billion for a war being fought on European soil. NATO has emerged as an increasingly relevant actor, after many years in which its role, even its existence, was questioned. Finland and Sweden have decided to join the alliance. One of the traditional obstacles for an EU defence policy has been the disagreement on whether the EU should seek greater autonomy from NATO. With the Russian invasion, this question has been solved. The Strategic Compass has positioned the EU not as an alternative to NATO, but as a valuable partner, with a clear division of labour. The Compass attributes the role of Europe's collective defence clearly to NATO while the EU focusses on crisis management.

Part II on monetary policy opens with an article by Ursel Baumann, Manfred Kremer, and Christophe Kamps, from the Directorate General Monetary Policy at the ECB with an intriguing title, *Baptism by fire: the ECB's new monetary policy strategy in the current high-inflation environment.* The ECB adopted the new monetary policy strategy on 8 July 2021 with the secular decline in the equilibrium real interest rate in mind. The strategy adopted an explicitly symmetric 2% inflation target over the medium term, and emphasized that, when the economy is operating close to the lower bound, it requires especially forceful or persistent monetary policy action to avoid negative deviations from the inflation target becoming entrenched. The ECB did not adopt an average inflation targeting strategy. By the time the new strategy had to be implemented, the inflation environment had radically changed. So, this chapter addresses a simple question, was the new strategy useful to guide monetary policy to bring inflation back *down* to its target? Because, ideally, a strategy "should be robust to possible shifts in the underlying forces shaping the inflation dynamics, thus providing a long-lasting playbook for handling a wide range of scenarios."

Inflation expectations are a key gauge of central bank credibility. As long as economic agents trust the central bank to be willing and able to do whatever is necessary to maintain price stability in the medium term, inflation expectations will remain anchored at the inflation target. Credibility is the foundation of the regime of monetary dominance that has preserved the low inflationary environment for almost 50 years. And precisely that regime of monetary dominance has been questioned in the current inflationary episode. Questioned by economist and policy makers who believed that: (i) the output loss to bring inflation back down to target was a price not worth paying, (ii) the risk of financial instability and potential fragmentation would impede the ECB to act decisively, (iii) the size of the ECB balance sheet had made it subject to fiscal dominance, or (iv) the ECB would put preserving the integrity of the euro area ahead of inflation considerations.

This chapter provide an ample range of evidence that is consistent with a firmer anchoring of inflation expectations at 2% after the announcement of the ECB's symmetric inflation target back in the summer of 2021. Since that summer, inflation in the euro area has persistently surprised on the upside. The rise in core HICP inflation was initially mainly supply-driven, (energy supply and commodities shocks on top of earlier supply bottlenecks), but the importance of demand factors has gradually increased over time, with the lifting of pandemic restrictions. In recent months, supply and demand factors have played broadly similar roles in fostering inflationary forces. Central banks have had to shift rapidly their focus from tackling low inflation to combating high inflation, especially as it became increasingly clear that, "even when supply shocks fade, the disinflationary dynamics of past decades were unlikely to return."

The authors distinguish three main periods in the actions of the ECB: an initial phase covering most of the second half of 2021, during which the monetary policy stance remained highly accommodative; a second phase starting in December 2021 and extending through most of 2022, when the ECB embarked on a monetary policy normalisation path; and a third phase when monetary policy will enter restrictive territory, as announced at the ECB's meeting on 15 December 2022. They rightly argue that when looking at the first phase, it is important to avoid the hindsight bias. At that time, "when it was not yet evident that inflation expectations would durably re-anchor at the 2% target," the new strategy prescribed patience and persistency in monetary policy accommodation. Patience also called for by the flexible medium-term orientation of monetary policy, which allows for short-term deviations of inflation from target, as well as lags and uncertainty in the transmission of monetary policy.

There is a legitimate discussion on the best timing of rate lift-off, although the authors underline two considerations that suggest that the exact timing of lift-off may not be that crucial. First, market expectations of the future path of policy rates had moved upwards already well in advance of the actual rate lift-off, bringing forward the tightening of financial conditions, Second, the entire interest rate path and its ultimate destination, the "terminal rate" has proven more important than the date when the rate normalisation journey starts. But the question remains whether the "patient" mindset framed by the new strategy did not prevent an earlier identification that the economy was entering into a new inflation regime and a more pre-emptive monetary stance. One could also question whether the necessary consensual decision-making at the ECB does not structurally imply an inertial bias to scenario changes. And whether that tardy reaction may not force the ECB to act longer and more forcefully than otherwise necessary to re-anchor inflation expectations.

With time, as it became increasingly evident that inflation was not purely transitory, the ECB began normalising monetary policy in December 2021, with the decision to end net purchases under the PEPP at the end of March 2022, but it was not until the summer that the ECB's key policy rates were increased by cumulatively 250 basis points at the July, September, October, and December meetings. The ECB rationale all along 2022 was for a *normalization* of the monetary stance, to leave finally behind QE and negative rates, to gradually deleverage its balance sheet and bring back rates to a neutral level, while still accepting that the natural real rate had structurally moved to a lower level. Financial markets read this policy stance as suggesting that nominal rates would peak and remain around the 2% level.

All through the normalization process, the ECB maintained flexibility in the design and conduct of asset purchases to address threats to monetary policy transmission. In light of severe market tensions, on 15 June 2022 it decided to apply flexibility in reinvesting redemptions coming due in the PEPP portfolio. In addition, in July 2022 it introduced the Transmission Protection Instrument (TPI) to support the effective transmission of monetary policy, an instrument extensively commented in this Yearbook. And on 27 October 2022, it also decided to adjust the interest rates applicable to TLTRO III from 23 November 2022 and to offer banks additional voluntary early repayment opportunities.[15]

By the end of 2022 the ECB was ready to enter the third phase of its policy shift and

[15] Early repayments amounted to €743.8 bn in total in 2022, helping to alleviate collateral scarcity concerns that had become apparent in repo markets over previous months.

replace normalized for restrictive policy in its communications. Staff projections at the December meeting showed a significant upward revision to the expected inflation path, with inflation projected to stay above the target until well into 2025. Therefore, the Governing Council announced that interest rates would still have to rise significantly at a steady pace to reach levels that were sufficiently restrictive to ensure a timely return of inflation to the 2% medium-term target and guard against the risk of a persistent upward shift in inflation expectations. In that last meeting of the year, the ECB also made public the principles for normalising the Eurosystem's monetary policy securities holdings.

This chapter finally discusses the role of forward guidance in the ECB monetary policy strategy. Initially introduced to decouple financially the euro area from the US, it was adapted in the revised monetary strategy to link it both to actual, realised progress in underlying inflation, and to projected inflation reaching 2% well ahead of the end of its projection horizon and durably for the rest of the projection horizon. ECB forward guidance became of a state-based nature, allowing for changes in conditions to guide expectations about the ECB's rate policy, rather than a time-based nature, which would have locked in rate policy irrespective of the course of future events. In June 2022, the Governing Council assessed that the forward guidance conditions had been met, thus paving the way for a lift-off of the ECB's key policy rates and a return to a data-dependent, meeting-by-meeting, approach. Consistently and based on the revised inflation outlook, at the December meeting, the ECB communicated that interest rates would need to rise further to reach sufficiently restrictive levels. And at the press conference, ECB President Lagarde explained that based on the data available at that point in time, the Governing Council expected to raise interest rates at a 50-basis- point pace for an extended period of time.

In chapter 3, Maria Demertzis and Conor McCaffrey from Bruegel and EUI take a complementary approach and write about *The ECB as part of an imperfect architecture*. The rationale for this chapter is simple, the unique and incomplete structure of the Euro Area brings significant risks and challenges to monetary policy. They use two well known facts - the special links between multiple EU sovereigns and the ECB, and the risks of monetary tightening resulting in financial fragmentation, to discuss the limitations of the European architecture, namely of the European Stability Mechanism and the Transmission Protection Instrument.

Independent central banks are the norm. CBs are not allowed to buy sovereign bonds directly from their governments, but they can do so in the secondary market, debt that already exists, as this is not government financing. Nevertheless, as Quantitative Easing became part of the standard toolkit to fight deflation, the borders between monetary policy and monetary financing became blurred. Central banks massive interventions lowered government yields, therefore facilitating expansionary fiscal policies. This is particularly true in the case of the ECB which acts through 19 sovereigns, 20 as of January 1st, 2023, with Croatia. Consequently, we have insisted in this Yearbook that the ECB is institutionally forced to take quasi-fiscal decisions.

As a result of massive QE, the ECB's balance sheet has become dependent on the quality of multiple sovereigns, subject to contagion effects and even the sovereign-bank doom loop. With the ECB hiking interest rates aggressively, monetary, and prudential (financial stability) policies may become contradictory. Within the EMU, a degree of yield divergence, or fragmentation, is both to be expected and justified, given the different economic fundamentals across member countries. However, excessive financial fragmentation is a problem that derives from the unique institutional architecture of the EMU. Nineteen countries with distinct economic fundamentals and policies sharing a single currency and monetary policy. This fragmentation impairs the monetary transmission mechanism, the authors rightly argue, as governments, and therefore consumers and businesses, across Europe are effectively faced with different borrowing costs. At the same time, EMU fiscal framework has failed to enforce discipline and therefore leaves Member states vulnerable to market sentiment. This chapter argues that the yield response to increases in interest rates could be subject to non-linearity, and therefore sovereign spreads could spiral beyond fundamentals. Ensuring fiscal rectitude is the Member states' responsibility, but beyond that, the Euro architecture needs policy tools to prevent excessive fragmentation.

Demertzis and McCaffrey discuss three important factors contributing to potential excessive euro area fragmentation. First and foremost, "the lack of a clear, unquestionable buyer of last resort, in contrast to the US Fed or the Bank of England." Second, the ECB's collateral framework that relies on the pro-cyclical ratings of private credit agencies. And third, inevitably, redenomination risks. "Taken together, the risk of fragmentation in the euro area is obvious." I fail to see the importance of the first two. The ECB has indeed operated as a lender of last resort, *lolr,* after the reforms implemented with the financial crisis, so maybe what the authors would like to see is a more active role of the ECB as *lolr,* perhaps to compensate for the uniqueness of the Euro Area. I am concerned this would question ECB independence and would open the way for fiscal dominance. The case of the US Fed is not a good example since it enjoys an exorbitant privilege as the provider of the reserve currency of the world. And granting the ECB the right to determine ratings would only challenge its credibility and throw the monetary authority in the midst of endless and nasty political battles.

The ESM was created, and the ECB adopted OMTs, to act as a lender of last resort for governments in the financial crisis. ESM intergovernmental nature requires unanimity what makes it very slow for financial crises, and requires conditionality, what makes it very unpopular. Countries reject "the intrusive monitoring of EU institutions". Given the stigma associated to the use of the ESM and the OMTs, the ECB introduced the TPI in July 2022, a tool to intervene in the secondary market of government securities to avoid the deterioration in financing conditions not warranted by country-specific fundamentals, provided the macroeconomic fundamentals of the country in question being deemed to be sound.[16] We have already commented on the uncertainties regarding its conditionality.

[16] The ECB has defined that eligibility would be dependent on four main criteria: 1. "*compliance with the EU fiscal framework*"; 2. the "*absence of severe macroeconomic imbalances*"; 3. "*fiscal sustainability*", as determined by debt sustainability analyses carried out by various institutions, including the ESM, but also internal analysis

The current design of TPI is however imperfect, according to the criteria of the authors of this chapter. Mostly, they take issue with the political process used to determine eligibility for support. The ECB has given itself significant discretion to decide both when to intervene and when to withdraw support. This deliberate ambiguity, coupled with the role given to internal ECB debt sustainability analysis, gives the central bank enormous leeway to take what will essentially be high-stakes political decisions. The authors would favor another process, and propose the Commission or the ESM to determine the sustainability of a sovereign's debt, an initial assessment that would then be approved by an established political body, such as the European Council or Parliament, to ensure legitimacy.[17] Contrary to what both authors believe, it is my understanding that this process will not only not free the ECB from the need to take unpopular decisions, but it would place the ECB as an institutions explicitly taking instructions from political bodies. ECB functional independence will be terminated.

I understand the authors' dilemma trying to solve what they rightly call, Europe's catch-22 problem: financial fragmentation can only be dealt with if there is no risk of debt sustainability. Debt sustainability requires the capacity to enforce fiscal discipline, preferably before it is too late. This requires strong conditionality and building fiscal room in the good times. It also requires legitimacy and credibility on the part of the authorities making the call. The ECB might have it for financial markets. It only might. The Council, the Parliament or the Commissions certainly do not have it and will not have it. Political legitimacy is to be pursued, but not at the cost of market credibility. Because then, whatever instrument is designed to avoid fragmentation will not work, short of capital controls. And that is a road no advanced capital market aspiring to have a credible reserve currency could take.

Chapter 4 looks at the profitability and solvency of financial institutions in the Euro area. Alejandra Kindelán and Santiago Pernías, president and senior advisor of the Spanish Banking Association, AEB, write on *The banking outlook in Europe: better margins versus potential [higher] delinquency rates*. This chapter starts with a very detailed and comprehensive review of the macroeconomic environment and recent monetary and fiscal policy decisions that may affect banking results. The shift from negative to positive interest rates and from a flat to a positively sloping yield curve, combined with a scenario in which there are no liquidity constraints, is more favourable for the development of banking activity.

However, a direct and immediate pass-through of higher rates to better bank results cannot be taken for granted, since when interest rates rise, (i) credit institutions will also have to bear the increase in the cost of funding, (ii) there are assets in their balance sheets that register capital losses, (iii) assets and liabilities show different elasticities depending on the instruments and counterparties, (iv) the repricing of assets and lia-

by the ECB; and 4. compliance with country specific, RRF and European Semester commitments and recommendations.

[17] Mindful of the need to intervene decisively in real time, they propose that this political assessment of debt sustainability be done at pre-arranged regular intervals.

bilities takes place at very different speeds, (v) non-performing loans tend to increase also, and finally (vi) governments are inclined to take fiscal and tax policies, regulatory and supervisory measures to capture part of the expected surplus.

Kindelán and Pernía offer a thorough and granular analysis of the recent evolution of the different components of banks' balance sheets, both at the European and Spanish level, so full of data, charts, and insights that my summary can only expect to induce its reading. They start with an item-by-item analysis of the evolution of banks' balance sheets. In aggregate terms, the balance sheet of European banks, which with slight variations had been hovering around €21,500 billions of total assets in the years preceding the Covid crisis, has increased by 20% between December 2019 and June 2022 to over €26,000 billion. The measures adopted by central banks to avoid another liquidity crunch explain half of this asset growth.[18] This expansion has resulted in a *structure switch* with interest-earning assets being now lower than interest-bearing liabilities. Thus, the increase of interest rates is less favourable than in the past. It is also important to underline that the volume of assets and liabilities with central banks in June 2022 represented no less than 17% of total assets and 8% in the case of liabilities. Their contribution to net interest income (NII) is subject to the needs of monetary policy and has dramatically changed with the decisions adopted by the ECB on October and December 2022 that imply that from the last month of the financial year 2022, the €2 trillion of TLTRO III that banks have borrowed from the ECB and an equivalent amount of reserves deposited with the central bank will not generate any net interest income.

Approximately 44% of total assets of European banks corresponds on average to loans to households and non-financial corporations. Their increasing contribution to margins with the rise in interest rates underlies the expectations of extraordinary bank profits. However, rising rates would typically result in a reduction in credit volumes and the response to interest rate changes varies considerably between Member States' banking systems: "While at the euro area level around 70 per cent of outstanding loans to households are at a fixed interest rate, this share is as high as around 90 per cent in France and Germany and as low as 25 per cent in Spain and Italy." The second group of assets which, in terms of volume, make up the interest-earning assets are debt securities. The influence of debt securities on margins is twofold: in valuation losses on fair value portfolios and in maintaining their contribution to net interest income, which will only reflect increases in interest rates as portfolios are rolled over.

Deposits from households and non-financial corporations constitute the main source of funding for European banks, accounting for 41% of total liabilities with a cumulative annual growth rate of more than 5% since 2015. The speed of response of the remuneration of non-financial corporate deposits is significantly faster than that of household deposits and from August 2022 onwards it has entered positive territory.

[18] The authors remind us that as a result of the measures taken to maintain the flow of credit to the economy and provide relief to borrowers, European banks hold €616 billion in loans with expired moratoria on their balance sheets, 44% of which are loans to households. A further €365 billion corresponds to loans subject to public guarantee schemes.

Finally, the repricing of debt securities issued, and other interest-bearing assets and liabilities is not likely to have a significant effect on NII.

To complete this summary description of the structure of European banks' balance sheets, equity has remained stable at around 6% of total assets in recent years, with slight changes in its structure in favour of a greater weight of reserves, reflecting the efforts made to capitalise earnings. European banks have maintained a CET1 ratio of around 14.5% in the years immediately preceding the pandemic crisis, which increased one p.p. in 2020, partly due to the ECB's recommended cap on dividends that year and remained at 15% in June 2022.

European banks have withstood reasonably well the period of too low for too long and even negative rates, during which the net interest margin only dropped 20 basis points of return on total assets to 1.04% in June 2022. Net interest income continues to be the main determinant of operating income and at no time fell below 50%. Net income from fees and commissions, which yield a return equivalent to 0.6% of total assets and account for approximately one third of total operating income, has remained practically constant in proportion to assets. Other sources of operating income, net trading income and exchange rate differences, are highly volatile.

Looking forward, the net effect of higher rates on net interest income will be determined by all factors mentioned above: (i) Loans to businesses and households account for 44% of total assets. Anti-inflationary monetary policy aims to reduce the stock of credit; (ii) A very high proportion of these loans to businesses and households (57% as of June 2022) will not be repriced over the next 12 months, (iii) Debt securities, 11% of total assets, are mostly fixed rate and their contribution to the margin will only increase when holdings are renewed; (iv) Unlike household deposits, corporate deposits show a faster and more intense response to the rise in interest rates. Competition between banks and with other investment alternatives (funds, for example) is probably to blame; (v) Close to 17% of total balance sheet assets and 8% of liabilities are represented by balances with central banks whose profitability/cost income will be determined by the decisions taken by the monetary authorities, as we have just seen; (vi) A final group of remunerated assets and liabilities, the net borrowing position held by European banks with credit institutions and other financial intermediaries, is presumably short-term and highly sensitive to changes in interest rates.

Confidence on future net fee and commission income with digitalization may prove excessive since they are closely linked to activity. European banks have been cutting administrative expenses which, as a proportion of total assets, are now 20 basis points lower than just four years ago. Despite this, cost to income ratios have not increased and show notable disparities according to both the banks' business model and the different jurisdictions. In an inflationary context, the contribution of these items to overall profits cannot be expected to improve substantially, and it could worsen if active measures are not taken.

Turning finally to results, at the end of the first half of 2022, the average ROA for Eurozone banks, return on assets, stood at 0.46%; a ratio which compares reasonably well with previous years. This is not the case for ROE, which at 8% as of June 2022, is still far from pre-crisis 2008 levels (above 10%) and, although growing, it still does not match the cost of capital. Spanish banks show similar characteristics to those described for European banks in general, in terms of the composition and recent evolution of their balance sheets and results, and the risks they face. But they have a peculiar business model, focused on retail commercial banking and geographically diversified. Therefore, net interest income plays for them a greater role in the evolution of the profit and loss account.

Finally, this article looks at nonperforming losses. The starting situation is reasonably positive, the NPL ratio is at the lowest level since the global financial crisis, coverage levels have been maintained, the cost of credit is acceptable, and banks have arguably already absorbed, if not all, a large part of the impact of the pandemic in 2020. Certain sectors have been particularly affected by covid19 and the Russian invasion of Ukraine, but the weight of these sectors in bank credit is not high and, unlike the real estate sector in 2008, there is no significant concentration risk. Certainly, inflation and economic deceleration will have an impact on delinquency rates and the ability of banks to manage them and to cope with higher provisioning needs will be decisive in assessing the extent of the recovery in margins.

Part II is about fiscal policy in the Euro Area, and it starts with the most recent news. In chapter 5, Gilles Mourre, DG Economic and Financial Affairs (ECFIN), writes on *The Commission's orientation for a reform of the European Union fiscal rules,* published in November. Based on these orientations and after discussion with Member States, the Commission will consider tabling legislative proposals to provide guidance for fiscal policy for the period ahead already in the first quarter of 2023. A very ambitious objective given the initial reaction of some governments. In any case, there is widespread agreement that the current rules are inadequate. Their limitations may be summarized as follows: (i) based on various unobservable variables, the rules have become too complex, hindering transparency and predictability; (ii) they lack national ownership; (ii) and offer limited incentives for reforms and investments, (iv) they have operated in a pro-cyclical manner (v) and their enforcement record leaves to be desired, with almost half of the Member States that never met a prudent fiscal position.

Mourre argues that the current higher debt-to-GDP as a result of the pandemic and the great financial crisis, and the necessary financing for a digital and green, climate-neutral economy call for new fiscal rules that both safeguard fiscal sustainability and allow for strategic investments. This simple sentence describes the core of the Commission proposal, aiming to integrate the dimensions related to fiscal policy, structural reforms, and public investments. The euro area needs fiscal rules that not only ensure fiscal discipline and avoid negative externalities but also that promote good investments. A dual objective that would allow Member states to have the cake and eat it. One could argue, as this chapter does, that these dual-purpose fiscal rules are the necessary political compromise in the euro area, a second best given the realities of the Union, but one could also question whether this approach will deliver fiscal credibility, and thus provide financial stability for sovereigns without constant recourse to ECB interventions.

The review of the economic literature on fiscal rules draws some interesting insights. There is a growing academic consensus that (i) stresses the need for a single operational indicator anchored on a medium-term debt target, (ii) agrees on a simple nominal observable expenditure target as the operational variable, and (iii) highlights the need to accompany fiscal rules with a centralised fiscal capacity. Nevertheless, this last point is completely absent from the Communication, "given the lack of political consensus on the issue", a surprising argument since it assumes that consensus exists on the rest of the proposal. Additionally, although implementation and enforcement challenges tend to be overlooked in the literature, it is clear that financial incentives are easier than sanctions and that a control account could ensure better medium-term compliance by allowing governments to offset deviations across time.

A national medium-term fiscal-structural plans constitutes the centrepiece of the proposed revised fiscal framework. A single operational indicator anchored on a sustainable debt trajectory would serve as a basis for setting the fiscal adjustment path and carrying out annual fiscal surveillance. This single indicator is the (nationally financed) net primary expenditure, i.e., expenditure net of discretionary revenue measures and excluding interest expenditure and cyclical unemployment expenditure. The agreed multiannual net primary expenditure path should be defined to ensure debt sustainability. The fiscal path expressed in terms of an acyclical primary expenditure will ensure the counter-cyclicality of fiscal policy in normal situations. Robust escape clauses will still be needed to stabilise the economy in exceptional situations.

This medium-term approach would allow for differentiation between Member states. At the same time, fiscal-structural plans will respect a common EU framework, facilitating transparency and equal treatment between Member states. In practical terms, the Commission would put forward for Member states with a substantial or moderate public debt challenge, a reference multiannual adjustment path in terms of net primary expenditure covering at least 4 years. The reference adjustment path would be anchored on debt sustainability. Based on a positive assessment by the Commission, the Council would adopt the medium-term fiscal-structural plan, including its fiscal trajectory. Importantly, the fiscal path contained in the plans would be binding on national budgets. A change of government would not be a reason per se to reopen the plan, but the new government could request its reopening.

Additionally, for countries with significant debt problems, the adjustment period of 4 years to put debt on a declining path can be extended by up to 3 years to facilitate a set of major investments and reforms. Through this extension and provided a concrete and detailed reform plan is agreed, the Commission pretends to buy in the more fiscally vulnerable countries. The author considers this enticement a welcome step towards national ownership that facilitates enforcement. But a sceptic may well remember that precisely this type of growth-enhancing structural reforms was used to weaken the Stability and Growth Pact already in 2003. For many economists, precisely that interpretation of the fiscal rules to accommodate national ownership and political priorities lies at the root of the EU fiscal credibility problems.

Also, to increase national ownership, the Communication charges the independent fiscal institutions in each Member state with assessing the assumptions underlying these reform plans and monitoring compliance. An interesting development only if its autonomy and capacity is in many cases built up and guaranteed through a strict European surveillance. One could think of the difficulties already observed with some National Statistics Offices to be intrigued with the unintended consequences of relying in national authorities to enforce European rules.

Finally, since the Commission proposal gives more leeway to Member states to design their own fiscal trajectories, a more stringent enforcement process at EU level is necessary. The excessive deficit procedure (EDP) would remain unchanged for breaches of the deficit reference value of 3% of GDP. The EDP for breaches of the debt criterion would focus on departures from the agreed net expenditure path. The Commission would use a notional control account for each Member State to keep track of cumulative deviations. The range of sanctions would be broadened by adding reputational sanctions. It seems to me that the proposal is overly optimistic on the capacity of reputational sanctions to steer fiscal stability and assume that *financial sanctions*, once limited in quantity, would be easier to use.

Chapter 6 takes a different turn and looks at the most significant example of European fiscal policy. Juan Pablo Riesgo and Luis Socías write *A forward-looking assessment of NextGenerationEU deployment in Spain*. The European Recovery Plan, widely known as Next Generation EU, is the cornerstone of Europe's response to Covid-19. The EU mobilized within just four months almost €2 trillion to speed the European economy's recovery from the pandemic and to facilitate the transition to a more digital, green, and sustainable paradigm. The main instrument is the so-called Recovery, Transformation and Resilience Plan (the Plan) presented by the Spanish government to the European Commission in April 2021 and approved in June. This chapter reviews the main commitments assumed -a staggering 110 investments and 102 structural reforms, encompassing a total of 415 milestones and targets- that will define Spanish economic policy until at least 2026. The release of the European funds is conditional upon attainment of the reform milestones as well as the investment targets.

Although the initial diagnosis articulating the reforms and investments was adequate, the Plan is unfortunately only this government's plan, giving the lack of participation and formal endorsement by Parliament, the regional governments, and social partners, especially the business community. A year and a half after its passage, the success of the plan is questionable, marred by the slow adjudication of the funds to the real economy, growing doubts regarding the effectiveness and efficiency of some of the investments financed, and uncertainty and caution about the lack of ambition of the first reforms.

The idea of shoring up Europe's industry and strategic autonomy, translated in Spain's Plan into strategic projects known as PERTEs, for their acronym, that are not delivering the expected results in 2022, particularly in sectors of great strategic importance for the Spanish economy such as the automotive industry. Moreover, the government has been unable to overcome two important roadblocks: its own lack of administrative agility and absorption capacity, and the inability to deploy the main tool designed for a transparent managing and controlling the funds: the Common European Funds Platform, widely known for its acronym as CoFFEE.

On the reform front, Spain had the golden opportunity to tackle a few very relevant and highly diagnosed structural reforms with the potential to have a decisive impact on its economic and social model. But the government decided against it and opted for a very long list of lower-impact measures. This approach gives a false impression of activism and allows for great public relations, but falls short from improving the country's competitiveness, resilience, and solvency, despite the European Commission's initial positive appraisal. A surprising assessment, because this approach runs contrary to all theory and experience of conditionality in structural adjustment programmes by the IMF, the World Bank, and even the European Troika with the European Financial Stability Fund, and the ESM.[19] Riesgo and Socías argues likewise with the frustrating example of pension reform.

When assessing the deployment of the investment plans in Spain, the authors underline four areas for improvement. First, the need to get the funds flowing faster to the real economy. Sweden, France, and Germany stand out for implementation in 2021, around 30% of the total funds assigned to them, compared to 3.47% in Spain and 2.58% in Italy. This tardiness has not changed in 2022. The official budget outturn data as of 30 September shows that only 22% of the funds budgeted for 2022 had been paid out, 31% of which had only been transferred to the regional and local administrations but have not necessarily reached the real economy. It is important to note that there is no official repository of information, a lack of transparency that should be addressed urgently. Therefore, this chapter relies on estimates privately compiled by relevant institutions like EsadeEcPol and EY, through their NextGenEU Spain Observatory and Spain's business employers' association, CEOE, through its European Projects Office.

Second, there appears to be only marginal transformative and innovative impact of the projects approved. One worth exception, however, is the Digital Kit, rolled out taking a novel approach to supporting SMEs. Third, the business community has clamoured against the lack of flexibility in the design of funding calls. It is important to keep in mind that prior to NGEU, most companies had never participated in a public tenders. And four, as already mentioned, the shortage of official information regarding the amount of funds reaching the real economy, the last official report dated August 2021,

The strategic projects for economic and recovery, PERTEs, are one of the biggest novelties derived from the NextGenerationEU package in Spain and one of the instruments destined to have the biggest impact. The government should be praised for this new tool for public-private collaboration, inspired by the European Projects of Common Interest (PCIs). Since December 2021, a total of 11 strategic projects have been approved, for a total of over €30 billions of public investments. However, the authors report certain issues that have reduced the initial potential of this instrument: (i) slow implementation and missteps in publishing the tenders, (ii) inconsistencies in the calls

[19] See ECB, Occasional paper 235, 2019, *Conditionality and design of IMF-supported programmes*, https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op235~e70851374f.en.pdf

with respect to the scope of the joint and several liability, (iii) difficulties faced by the SMEs in securing the required guarantees, (iv) scant involvement by banks, (v) tight deadlines for presenting complex and detailed applications, and (vi) overly stringent specific tender technical requirements.

In closing this chapter, the authors offer a list of recommendations to improve the deployment of the RRF to make sure it delivers on its potential and constitutes the success, both the Spanish economy and the EU need. They include: reinforcing political, social and territorial consensus; strengthening reform ambition and focus, in line with the European Semester Country Specific Recommendations; maximizing the use of tax incentives as the only effective tool to accelerate deployment and align the government's plan with business priorities; accelerating the digitalization of government procedures; incorporating new large-scale projects for investing in human capital; involving the financial sector; and improving transparency.

In Chapter 7, Mario Alloza, Economist, and Ángel Gavilán, General Director Economics and Statistics, Banco de España, write *Towards a normalisation of fiscal policy*, a study on how to adapt European fiscal policy to the new inflationary environment. The European Commission had suggested that the Stability and Growth Pact's (SGP) escape clause could be deactivated in 2023, but the invasion of Ukraine drastically changed the European outlook, and the deactivation was postponed by a year.

This chapter discusses first how fiscal policy in the EU should respond to high and persistent inflationary pressures, deteriorated public finances (after the sizable fiscal stimulus to counteract the financial crisis and the pandemic), a considerable degree of uncertainty, and an energy crisis. A discussion that could be summarized in the following principles: (i) A broad-based fiscal impulse should be avoided, because the fiscal space is relatively limited, and because it would exacerbate the current inflationary pressures; (ii) fiscal policy support should target lower-income households – those hardest hit by inflation – and most vulnerable firms to the energy and commodities shocks; (iii) fiscal measures should be temporary, so as to avoid any structural deterioration of the public accounts; (iv) they should avoid any significant distortion of price signals or of economic agents' incentives, and (v) given the current high level of uncertainty, it would be desirable to adjust swiftly the overall fiscal policy stance. Moreover, strengthening the sustainability of public finances would require the early definition of a multi-year fiscal consolidation plan to generate certainty and trust in public policies.

With a view to improve the stability of the area in the medium term, the authors also discuss how to reform the fiscal architecture of the EU. The main elements of the Commission proposal for new fiscal rules have just been commented. Alloza and Gavilán welcome some of its ideas, like its attempt to simplify the rules and to allow for different speeds of adjustment towards common medium-term targets. But "there are several critical unknowns, such as the precise role that Debt Sustainability Analysis (DSA) tools will play, how the reference debt-reduction plans will be designed, and how effective the new framework will be in ensuring compliance".

The European fiscal governance framework should also be completed to expand the risk-sharing channels. In particular, they argue that the temporary SURE program launched to mitigate unemployment risks with Covid should be made permanent, and the timeframe for the NGEU programme extended to avoid an excessive fiscal (inflationary) impulse over the coming quarters. More generally, permanent new joint funding arrangements should be established to guarantee the necessary investments for the provision of more European public goods. Finally, the EU would need a central fiscal capacity, with revenue-raising and borrowing capacity, to complement the single monetary policy.

The authors take a close look at Spain public finances as an example of a high-debt EU country and discuss why the implementation of a gradual fiscal consolidation plan needs to start immediately. Spain is on course to close 2022 with a debt-to-GDP ratio above 110%, around 20 pp of GDP higher than at the end of 2019, before the pandemic, and well above average European levels. Spanish public debt dynamics have mostly been characterized by sustained fiscal deficits, and the median fiscal balance since 1995 has been -3.9% of GDP, with an average of -4.2%. Therefore, the public debt-to-GDP ratio has increased 58 pp since 2011. This fiscal deterioration has also been evident at a structural level, with an increase of 1.1 pp in the total structural deficit with respect to 2019 (the primary structural deficit also rose to 2.3%, up from 0.8% in 2019). Moreover, fiscal policies have, in general, been unable to take advantage of favourable times to build sufficient buffers. As an illustration, fiscal policy in Spain is still expansionary today. Even a reduction in the structural public deficit of around 0.5 pp of GDP in 2023 would not be sufficient to offset the estimated contribution of NGEU funds to GDP growth in 2023 (around 0.6 pp) and the net fiscal impulse would still be positive.

This systematic increase in the level of public sector indebtedness poses considerable macroeconomic risks. First, excessive public leverage impairs the stabilization capacity of fiscal policy. Furthermore, increases in public debt beyond a “prudent” debt threshold, tend to generate higher vulnerabilities to sudden changes in market sentiment. Second, sustaining high levels of public debt generates macroeconomic distortions that hamper economic growth. In addition to the crowding-out effect, they usually result in distortionary taxation or cuts in productive public spending. Third, the existence of excessive levels of public debt might slow down the recovery after a financial crisis. Fourth, compliance with the ECB’s new anti-fragmentation tool (TPI) and the upcoming new European fiscal framework is a further reason for pressing ahead with fiscal consolidation. Fifth, the sign of the difference between the return on safe assets (r) and the growth rate of output (g) may be changing structurally from negative to positive, posing new risks to fiscal sustainability in high-debt countries.

In sum, the current high level of public indebtedness in Spain, coupled with increasing ageing costs, entails a constant structural deficit that could drive the public debt-to-GDP ratio towards unstable trajectories. The authors offer different simulations conducted by the Banco de España, under various assumptions regarding future economic growth and interest rate developments. All in all, these simulations illustrate the importance of implementing an ambitious fiscal consolidation to enable these imbalances to be gradually corrected and become sustainable.

Recent fiscal research reviewed in this article offers particular insights regarding successful fiscal consolidation processes. First, fiscal policy might be more impactful than previously thought, which implies that the speed and timing of fiscal consolidations should be carefully gauged. Second, the composition of fiscal policy matters: spending cuts tend to be less harmful in terms of economic growth than tax hikes. Additionally, consolidations that are heavily biased towards productive spending can have long-lasting effects on output. Third, interactions between fiscal and monetary policies are key to finding the optimal mix to stabilise output. Indeed, in a high-inflation scenario, monetary tightening works best if supported by the expectation of appropriate fiscal adjustment to prevent current fiscal imbalances from feeding into the inflation process. Fourth, deteriorated public finances and constrained monetary policy can give rise to pessimistic shifts in agents' expectations accelerating the deterioration in public finances through a sovereign risk-premium channel. Fifth, the early resolution of uncertainty surrounding the details, composition, and timing of future fiscal consolidation packages, could have a positive impact on output and welfare. And sixth, although inflation could initially help in fiscal consolidation, interest rates on new debt often rise fast enough to offset all or part of the positive effect of inflation.

Finally, this article offers some guidelines for the elaboration of a fiscal consolidation plan for Spain. First, the normalisation of public finances should not be achieved by applying the same rules to all types of spending. On the contrary, special emphasis should be placed on the composition of spending. Notwithstanding, there is ample room to increase the effectiveness of several spending policies. Second, a rigorous and ambitious fiscal normalisation plan should thoroughly review the current design of tax policy. In particular (i) Spain obtains less revenue as a percentage of GDP from indirect taxes and the effective tax on consumption is lower; (ii) an increase in environment-related taxes could play an important role; (iii) all current tax benefits should be reconsidered and (iv) Spain should continue to coordinate and harmonise the taxation of corporate and digital activities. Finally, the implementation of ambitious structural reforms would contribute significantly to the fiscal consolidation plan. If a careful selection of NGEU projects were to be accompanied by various structural reforms in the product and labour markets, the potential growth rate of the Spanish economy could be 1 pp higher.

Part III covers the regulatory priorities and challenges for the financial system of the Euro zone. In chapter 8, Francisco Uría, Global head of banking and capital markets in kpmg, writes on *Crypto asset global regulation: a risky delay*. For years now, the crypto phenomenon has remained unregulated, despite implying unfair competition and leaving consumers and investors unprotected. Much like in the case of shadow banking, its rapid growth can be explained by this lack of regulation, very lax monetary policy, the search for an alternative financial system, and a certain infatuation with technology. This chapter argues that there is an important element of distrust of governments and faith in technology that created "true believers" in a crypto world that would mechanically avoid political interference. And calls for "marriage" between the new possibilities provided by these technologies and our most basic legal system so that this "crypto revolution" can take place.

Crypto-assets appeared coinciding with the global financial crisis with the creation of Bitcoin (2008). Since then, the volume of crypto-assets in circulation has increased thirteenfold. The restrictive monetary stance adopted by major central banks to fight inflation has brough about drastic corrections in crypto valuations, and the crisis of some of the most significant intermediaries. Part of what happened has to do with the traditional boom and bust cycle of financial bubbles. Another part, with the fact that some of the crypto players were far removed, in terms of their organization, procedures and internal controls, from what constitute minimum standards established for years in the traditional financial sector. And a last, non-marginal part, with increasing regulatory demands on crypto intermediaries to prevent tax evasion, money laundering and the financing of terrorism and illegal activities, especially with the application of financial sanctions to Russia.

The initial light approach to regulate crypto finance has evolved and the Financial Stability Board (FSB) has committed to the adoption of some international standards by 2023. The International Organization of Securities Commissions (IOSCO) has also initiated actions aimed at the publication of standards in 2023. But many countries have decided not to wait and to provide crypto-assets and related services with their own regulation, which is therefore fragmented and hardly coherent. All these initiatives come with much delay once millions of people around the world have already invested in crypto-assets. It is true that these investors have ignored recommendations by regulators for retail investors to refrain from these investments. But the losses inflicted will not be marginal, and they could have a significant impact on the credibility and reputation of financial regulators around the globe.

The European Union was soon aware of the need for this regulation and has made progress in the regulation on crypto-asset markets, the MICA Regulation proposal. This new regulation endorses the principle of technology neutrality and is thus somewhat complementary to other European rules, mainly MIFID II. The MICA Regulation was created to fill the existing gap because of the non-application of these current rules to other types of crypto-assets. Nevertheless, effective application has been delayed until after 2024, far beyond what is reasonable.

MICA has four general objectives: legal certainty, support innovation, protect consumers and investors, and market integrity, and finally ensure financial stability. It defines crypto-assets as “a digital representation of value or rights which may be transferred and stored electronically, using distributed ledger technology or similar technology”. The chapter treats extensively the crypto-assets that would fall within the scope of application of MICA: Asset-backed tokens, electronic money tokens (or e-money token), and service tokens. For these activities, MICA establishes the following rules: (i) transparency and information requirements in relation to the issuance and admission to trading of crypto-assets; (ii) the authorization and supervision of crypto-asset service providers, issuers of asset-backed tokens and issuers of electronic money tokens; and (iii) the operation, organization and governance of asset-linked token issuers, e-money token issuers and crypto-asset service providers.

In addition to these “administrative” rules, so to speak, the Regulation also contains

(i) consumer protection rules in relation to the issuance, trading, exchange, and custody of crypto-assets; and (ii) measures aimed at preventing market abuse, in order to ensure the integrity of crypto-asset markets. These are rules of great importance. Had they been in force and applicable, they could have helped to avoid some of the turmoil and bankruptcies that have occurred at the end of the year. Despite its limitations, there is no doubt that, once MICA is implemented, Europe will have a framework of reasonable legal certainty that should allow the development of these activities.

In concluding, the author finds reasonable to distinguish between three issues which having a very different risk-reward profile, they should have a different regulatory treatment: (i) the emergence of crypto-assets derived from the use of DLT technologies and, above all, blockchain, which should be seen as a positive innovation, in need of a framework of protection, (ii) the world of crypto-currencies, in which a distinction should be made between "stable coins" and others, and over which there is doubt as to whether, given their risks, their use could be limited (and even banned), as has already happened in some national markets, and (iii) the discussions and preparatory works for the future creation of an European CBDC, the digital euro.

In Chapter 9, and last, Carolina Albuerne, partner at Uría Menéndez Law firm, writes on the *Prudential tools and transition risks in the EU: Can the two boxes be ticked simultaneously?* The transition to a less carbon-intensive economy poses significant risks for the financial sector. Financial regulators and supervisors across the globe are consistently taking swift and decisive steps to tackle climate risks. Notably, the Basel Committee on Banking Supervision (BCBS) has recently issued the final version of its standards on how banks will be expected to manage climate financial risks, as well as how supervisors will be expected to conduct their review. The European Central Bank (ECB) issued its own Guide on the management of climate risks in late 2020. Some supervisors have already undertaken the horizontal examination of the banks' practices to meet the standards set by supervisors. Regulators have introduced new prudential disclosure standards that address climate risks. Furthermore, banking supervisors have engaged in both top-down and bottom-up climate stress test exercises. Most supervisors are currently integrating the assessment of climate risks into their regular activities. Huge efforts have already been undertaken by both supervisors and banks, and, as a result, they have made significant progress in understanding, measuring, managing, and supervising climate risks.

However, the approach to the regulation and supervision of climate risks has so far been fundamentally qualitative. This chapter examines the feasibility of setting out quantitative requirements. In particular, it discusses the green asset ratio GAR, the carbon transition plans CTP, and the possible introduction of climate-sensitive capital requirements. These tools share some common features. First, they encourage banks to act as accelerators for the transition process, Therefore, the tools are primarily non-risk based. Second, they can also contribute to the mitigation of the transition risk for banks, as greener assets are less exposed to this type of risk. Third, these measures entrust banks with incentivizing their clients to make their own transition and to help countries meet their carbon emission targets. Fourth, they can also contribute to heightening other risks. Above all, these measures can interfere with the prudential framework, setting incentives for banks to increase their green assets at the expense of their risk profile. As a result, the risk of effectively implementing credit-guided approaches may not be negligible. When credit is guided, the allocation of capital by the financial sector is not strictly driven by risk-reward considerations, but also by other political, social, or environmental criteria, having a distorting effect on credit availability and pricing.

The first tool discussed in this chapter is the mandatory disclosure of the GAR. GAR mechanics are theoretically simple: banks should estimate and disclose the proportion of their assets that are green, according to common EU criteria. Ceteris paribus, the higher the indicator, the higher the contribution that a bank is making to sustainability. So far, the GAR does not include any specific minimum requirement or threshold, but it is expected that banks will be able to report systematic increases in their GARs. Investors should be able to quickly get a snapshot of how taxonomy-aligned and therefore sustainable, thus pushing banks to renew their green efforts.

Nonetheless, things are a bit more complicated. The calculation methodology, explained in detail in the text, raises a paramount question: banks with a portfolio composition that overweights assets that are included in the denominator but excluded in the numerator will systematically report lower GAR levels and they will not be able to upgrade the GAR of these portfolios. This will mainly affect banks with material portfolios in third countries or significant lending to SMEs and consumer loans. In these cases, the GAR may effectively deprive these segments of the funding that they will also need for their operations. To address this issue, the GAR has been complemented with an additional indicator, the Banking Taxonomy Alignment Ratio (BTAR), where banks are allowed to publish how specific exposures that are excluded from the GAR numerator are aligned with the EU Taxonomy.

Still, the effects on banks of the mandatory disclosure of GAR may be problematic. Investors and stakeholders may effectively push banks towards changing their business models. In an era where stakeholder capitalism is the mantra this may lead to an uptick in banks' risk appetite towards specific segments of the green lending market, which in turn may feed into dangerous green bubbles. Similarly, precisely these incentives can deprive key economic sectors from the necessary financing. Finally, the existence of a mandatory disclosure of GAR only in Europe may jeopardize the competitive situation of European banks.

Carbon transition plans are also currently under discussion in the new EU regulatory package (CRDVI). Conceptually, banks will be required to define, on a consolidated basis, their targets for the carbon intensity of their activities. The targets will be complemented with the actions, policies, procedures, and infrastructure required to gather and manage the large amount of data. The plans are expected to be risk-based, and therefore, banks will need to test their targets against different scenarios. The plans will be reviewed by the prudential supervisor, who may integrate the assessment of the CTP into its regular supervisory assessment.

These carbon transition plans are still at a very nascent stage. Nevertheless, there are several key questions on how these plans should be prepared. Questions relating to target setting, data availability, and the role in the broader supervisory framework. The real elephant in the room concerning CTP is the availability and comparability of sufficient data to support the credibility of the targets and the actions arising from them. These action could shift the structure of their asset portfolio over the medium term in a way that is not oriented y by profitability nor risk. Whether or not these plans should be disclosed is an important question. A final concerns regards how this new requirement can be materialised without imposing an unjustified and costly bureaucratic additional procedure.

Finally, this chapter deals with the use of capital requirements to accelerate the transition to a greener economy. At an international level, the Basel Committee has not shown any willingness to make any changes to the Basel III framework, arguing that the prudential regime should be risk-based, as any departure from this principle has the potential to undermine its credibility and reliability. But the EBA has been mandated under the European regulations to assess whether prudential treatment for assets associated substantially with environmental and/or social objectives would be justified.

In principle, two options are available. The first, and most popular, is to define lower risk weights for green assets. The second concerns the increase in risk weights for those assets that are identified as "brown". This chapter focusses on green supporting factors, as they are broadly considered more viable, and undertakes a review of the experience of the National Bank of Hungary, so far unique in introducing a green supporting factor for housing loans and for corporate and municipal exposures in 2019 as part of its ICAAP framework. The main effect of implementing a green supporting factor will be a reduction in the capital requirements that banks face for green exposures, thus banks will be encouraged to expand green lending and/or cut the interest rates of these loans. But the introduction of this regime come with significant drawbacks. It assumes a non-observable direct relationship between risk and green. But most importantly, disregarding risk-based considerations when defining the prudential framework sets a dangerous precedent and raises the risk of a credit guided model. In any event, several key elements on the design of the frameworks should be considered carefully: (i) the exact definition of the scope of the program, what green assets to be incentivised; (ii) the extent and amount of the benefits, (iii) the types of requirements, since in principle a green supporting factor could be implemented through the Pillar I or Pillar 2 Requirements or through the Pillar 2 Guidance, and (iv) the voluntary or binding nature of the regime.

The chapter concludes with a note of caution. In each of the three policy tools analysed, there is a trade-off between prudential supervision and encouraging the swift transition to a greener economy. Choosing the right set of measures is and will be key in the coming years, for the competitiveness, profitability, and solvency of the European banking system and therefore for its ability to serve its clients and contribute to the public good, decarbonization, but also to economic growth and prosperity.

3. LESSONS FROM TEN YEARS STUDYING HOW TO COMPLETE THE EUROPEAN MONETARY UNION.

Typically, the Yearbook ended with my ten European lessons of the year. This year they could be summarized in one, the Union needs to maintain its political determination to move together in an increasingly fragmented and volatile environment, both politically and economically. But this is the tenth edition of the Yearbook and I thought appropriate to review our contributions to the European debate. To do so, I have chosen one article from each edition. It is a personal selection to highlight the main ideas put forward each year by a wide representation of the contributors. It is an unfair selection, because this has been a collective project and I have been extremely fortunate to assemble an impressive number of colleagues from very diverse backgrounds, perspectives, and professional positions. But as the editor, I was guided by the relevance to today´s debates and political realities. I have started this selection with a reference to two previous studies on the nature of the Euro crisis, that, although not formally a Yearbook, constituted the foundation of this research project.

We started in 2011 studying *The crisis in Europe, a sovereign debt crisis or a euro crisis,* and Luis Garicano and Tano Santos wrote on The *Eurozone crisis, a diabolic loop between the financial system and sovereign debt,* where they already laid down the need to strengthen the Union with a crisis resolution mechanism to deal with the risk of structural financial fragmentation or "a potential breakup of the Union will always be with us." In 2012, we published *The Institutional architecture of the refoundation of the euro.* And José Manuel Campa wrote *The Construction of Europe, Towards a European Treasury,* emphasizing that advances towards a fiscal union were the missing step for a stable monetary union, for the ECB to be able to implement monetary policy without quasi fiscal considerations, without the risk of fiscal dominance we would write today. In essence, he argued for "the creation of a financial instrument with the capacity to become the reference for the cost of funding in all the Euro zone." The issuance and management of this euro safe asset will require building the Treasury for the Euro Zone.

The first edition of the Yearbook came out in 2013 when the Union was still dealing with the economic and social consequences of the euro crisis, and the credibility of European institutions was widely challenged on account of its alleged democratic deficit. Having laid down in the previous years the necessary institutional reforms in the Monetary Union, we wanted to highlight the political dimension of the Euro project. So, we asked Jose Ignacio Torreblanca and Josep Piquer to write *The New Political Geography of the Euro,* a reflection on how the euro crisis had changed the nature of the European Union and insisted on the need to gain legitimacy and popular support to make possible further integration of economic policies. Our goal was to emphasize that the euro was a political project that required additional transfers of sovereignty, that the Maastricht Treaty was only the beginning of a long road to a stable and lasting monetary Union.

In 2014, after the EU and the ECB in response to the depth and duration of the euro crisis, hurriedly implemented its first bail out programs that substituted for an EMU crisis resolution mechanism, it was time to evaluate and reflect on its rationale and effectiveness. So, in the Yearbook published in 2015, Guntram Wolf wrote *Assessing the financial assistance programmes.* Typically, the economic literature measures the success or failure of these programmes in two accounts. The first assesses whether the country regains access to capital markets and the confidence of investors. On this criterion, Ireland and Portugal succeeded soon Cyprus took somewhat longer and in Greece, politics prevented any normalization of the country's economy for way too long. The second criterion is more political and concerns the public perception regarding the most desirable magnitude of fiscal adjustments, and the quantity and price of the external aid required. Based on this criterion, the recovery of the balance of payments was faster than expected, but the magnitude of the internal adjustments, falling domestic demand and rising unemployment, were much greater than anticipated, as it is usually the case. Whether it was due to flaws in the design of the programs, lack of technical expertise, inadequate institutional arrangements or changes in external circumstances, an unexpected context of general deflation and recession in Europe, is still a matter of heated academic and political debate.

In any event, the EU resolve and determination was able to turn the possibility of voluntarily abandoning the euro in a crisis, and/or the event of expulsion from the Eurozone, into no more than a historical anecdote. The Union learnt that contagion is a fact and that a breakup cannot be contained, and Member states learnt that life outside EMU is dangerous and unstable. The question that remains unsolved is the distribution of costs between the Member states, the Union, and foreign creditors, and the cost the Euro Zone is willing to pay in terms of credibility and instability. A question that may get back to us if the recent hike in interest rates is accompanied with the lack of an adequate EMU fiscal governance and the irresponsibility of certain governments.

In 2015, with the financial crisis behind us and Europe´s economy clearly recovering, there still was a certain public perception of failure justified in an uneven recovery and the substantial differences in Member states in terms of growth and income, balance of payments and employment. On top of that, the UK embarked on an unimaginable solo journey and challenged the foundations of the EU by raising the possibility to leave and thus bringing to the fore the risk of a Euro breakup. So, in the Yearbook published in 2016, before the referendum and to advise our readers of what might come, we asked Phillip Souta to write on the *Legal and Economic Implications of Brexit.* He offered an unequivocal conclusion that has proven right: an eventual Brexit would push the United Kingdom into a lengthy period of inescapable legal uncertainty and gloom with many unforeseeable consequences, since given the degree of Great Britain's integration since 1973 much of its corporate, tax, employment, competition, consumer protection and commercial law stems from European law. Europe will be worse off, less free, and less prosperous without the UK. But the United Kingdom would be a less coveted international partner without its status as EU member, while the benefits of its geographical location would become less important and its legal and regulatory framework –one of its greatest assets – may become a hindrance or obstacle if it distances itself too much from the European model. The economic cost-benefit analysis was unquestionable, he argued. Yet, the unthinkable happened and both parties are still struggling to cope with the consequences.

We published the Yearbook in 2017 in a somber note, reflecting the depressing state of the Union in 2016 after Brexit. It was a year when populism paralyzed Europe, threatening the ideological and social pact that lies at the foundation of the Union. For many citizens, Europe had ceased to be the solution and become the problem. After the Brexit referendum, the relevant question was, now what? Jaime Caruana and Goetz von Peter offer a possible answer, complete monetary union. In their article, *The euro in an era of global imbalances,* they argue that the European institutional framework is indeed imperfect, but it is too often blamed by European leaders for exclusively domestic problems and the deficiencies of the international monetary and financial system. Something we still see today, when too many governments expect EU generosity to keep them out of trouble in the aftermath of the Russian invasion of Ukraine and continue to forget the need to keep their house in order. From their thesis, the authors conclude two corollaries. First, the leaders of the time were well aware of the flaws in the original design and intended to complete it when the time was right. The problem is that they have never found the right time. Second, too many attempts have been made to resolve these deficiencies with aggressive and excessively creative monetary policy. But the problem is not monetary, the problems that need to be addressed are institutional. A very early call about the dangers of relaying excessively on the ECB to cure all European maladies. And they insist, European problems would be much easier if accompanied by domestic structural reforms and international policies that focus more attention on global imbalances.

In the Yearbook published in 2018, we commended the Juncker Commission for putting forward in December 2017, an ambitious project in the direction of a banking, fiscal, economic, social, and defense and security union, which took the name of a roadmap towards a new constitutional treaty. Something we have been constantly arguing for in this Yearbook. In that vein, Pablo Hernández de Cos wrote *Rules and Institutions for fiscal governance in Europe*. He started by highlighting the improvements introduced in the European fiscal framework since the GFC: (i) the expenditure ceiling as the preventive weapon of the Stability Pact, (ii) the strengthening of debt criteria in the monitoring process, (iii) the tightening of the penalty regime and (iv) the creation of independent Fiscal Authorities. Significant improvements but not enough to overcome the remaining institutional flaws in the fiscal union: (i) the excess complexity and lack of transparency, and therefore the discretionality, of the rules. (ii) the lack of a Macroeconomic Stabilization Facility, and (iii) the absence of mutualization of sovereign debt and the creation of a risk-free European asset. The author concludes with a political message that has been the motto of this Yearbook, one which is completely valid today as we move forward towards a new fiscal framework, "the inevitable increase in fiscal integration can only come about as a result of an increase in fiscal discipline."

In the Yearbook edited in 2019, *Completing Monetary Union to forge a different world,* Fernando Restoy wrote, *The European Banking Union, achievements, and challenges*. The chapter recalls the main achievements in the domain of banking supervision: the launch in record time of the European supervisory authority, the SSM, and later the Resolution Mechanism, SRM. But low profitability remained the main structural weakness of European banking, which the author linked to overcapacity in the European banking industry and the persistence of too many banks outside the discipline of market forces. And European banking resolution needed significant improvements: a procedure to guarantee funding of essential bank activities in resolution, and the end to the existence of contradictory national legislation that allows for national forbearance of failing banks. And Restoy reminds us that the banking sovereign risk loop in the euro crisis did not come from bank assets, i.e., their sovereign debt holdings, but from macroeconomic uncertainty and doubts about the capacity of weak Treasuries. The reason, the need to complete banking union with two well-known but still ignored features: the European deposit insurance scheme (EDIS) and the "fiscal backstop" for the resolution fund.

In *The Euro at 20, A yearbook on the European Monetary Union,* we celebrated the 20th anniversary of the launching of the euro. And Aliénor Cameron, Grégory Claeys and Maria Demertzis, *Facing the lower bound, what will the ECB do in the next recession?,* questioned the limits of monetary policy in a deflation, The authors, reflecting the dominant academic thinking at the time, argued that monetary policy was increasingly constrained by the environment of very low interest rates, because of the secular decline in the "neutral rate" and recommended: (i) changes to mitigate the collateral damages of negative interest rates that were supposed to stay *lower for longer*, a primary warning for the ECB to design ways to reduce the costs of funding for banks and save their net interest margins, a call that later resulted in successive LTRO (Long Term Refinancing Operations) issues; (ii) to change the definition of the inflation target to around 2% for a longer period, thus anticipating part of the ECB revised monetary strategy; and (iii) to expand the tool kit of monetary authorities to the unthinkable, like helicopter money. With the hindsight of time, it is interesting to remember how relevant the discussion in the Yearbook on the determinants of the neutral rate was, and how timely the skepticism about the premature death of inflation.

In the 2021 Yearbook, *Moving forward, Monetary Union after Covid19,* we described at length the prompt and efficient EU response to the pandemic with expansionary monetary policy, the first ever issuance of euro debt to finance a euro-wide fiscal program, NGEU, and regulatory forbearance to avoid a credit crunch, an undisputable EMU success. Luis de Guindos wrote *The Monetary policy response, the role of the ECB.* He described at length the comprehensive set of measures taken by the monetary authority "to arrest highly disruptive, self-fulfilling feedback loops in asset prices and illiquidity that would otherwise have precipitated a much deeper economic contraction and unprecedented deflationary risks." At the same time, Guindos recognized the limited capacity of monetary policies to address structural factors and real sector crisis like this one. Thus, it emphasized the need to accompany monetary accommodation with prudential policies and fiscal and structural measures. These policies have bought precious time, but there is no free lunch, and the extraordinary monetary expansion, no matter how necessary and successful, raises unavoidable questions for the future action of central banks. Will the size of their balance sheets ever come back to levels similar to those prevailing before the GFC and Covid-19? Or will we live a long era of central bank dominance in financial markets? Questions that advanced the fundamental dilemma central banks confront today.

In the 2022 Yearbook, *Good Policies, a Gap year on reforms*, we commented on an Economic recovery that was slower and less intense than anticipated because uncertainty about Covid remained pervasive and the damage on our productive capacity long lasting and costly to repair. And inflation, more acute and persistent than purely transitory, increasingly questioning the predominant central banks' view. But the digital revolution was in full force, and we asked Santiago Fernández de Lis to write *The Digital Euro, a Hammer in Search of a Nail*. Arguments in favor of the digital euro have gained traction with the financial crisis, this pandemic and late developments in the digital ecosystem. But risks should not be minimized and depend crucially on the modalities of implementation. The ECB pragmatic position appears to limit these risks, but Fernández de Lis warns "it will need to reach a very delicate balance: designing a digital euro that is attractive enough to (partially) replace cash but not so much as to replace deposits. To address this problem, limits on the digital euro holdings are preferable to a tiered structure of remuneration." The collapse of the crypto assets market only undermines the need for caution and to resist the technological infatuation that threatens financial stability.

In closing this tenth edition of the Yearbook, it is remarkable how long concepts like banking and fiscal union have taken to travel from academic circles to opinion makers, and then to policy makers and regulators. We have tried to accelerate this journey by providing empirical evidence and theoretical arguments in a way we hope policy makers, and an informed public opinion can understand. In a European Union that today is significantly more diverse, complex, and heterogeneous, where globalization and digitalization bring about very different challenges and opportunities for Member States, and for different socioeconomic groups therein, the need to provide stability and clarity to the European constituency is paramount. We firmly believe, as all our co-authors along these years, that completing monetary union is the best contribution policy makers can do to the stability, prosperity, and future of Europe.

REFERENCES

Tobias Adrian, *Interest Rate Increases, Volatile Markets Signal Rising Financial Stability Risks,* IMF Blogpost, October 2012
https://www.imf.org/en/Blogs/Articles/2022/10/11/interest-rate-increases-volatile-markets-signal-rising-financial-stability-risks

Robert Blotevogel, Gergely Hudecz and Elisabetta Vangelista, *Asset purchases and sovereign risk premia in the euro area during the pandemic,* ESM WP55-2022
https://www.esm.europa.eu/publications/asset-purchases-and-sovereign-risk-premia-euro-area-during-pandemic

José Manuel Campa, Luis de Guindos, and Andrea Enria, *Strong rules, strong banks: let's stick to our commitments*, Blog post, 4 November 2022.
https://www.ecb.europa.eu/press/blog/date/2022/html/ecb.blog221104~34240c3770.en.html

ECB, Occasional paper 235, 2019, *Conditionality and design of IMF-supported programmes,* https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op235~e70851374f.en.pdf

European Union, Council Recommendation on the economic policy of the euro area, COM (2022) 782 final, Strasbourg, November 22, 2022.
https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=COM:2022:782:FIN

Fernando Fernández editor, *The Euro in 2022, Good Policies, a Gap Year in Reforms,*

Fundación de Estudios Financieros and Fundación ICO*, Madrid, February 2022*
https://institutodeanalistas.com/wpcontent/uploads/EURO_IN_2022_INT_Definitivo_1-1.pdf

Luis Garicano, *The ECB's new backstop introduces atrocious incentives,* Financial Times, September 21, 2022,
https://www.ft.com/content/e06f253d-5f06-4484-9ce0-658434a844cd

Paolo Gentiloni, speech at the European Policy Centre: *Reforming EU economic governance for the coming decade,* November 2022,
https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_22_7166

Donna S. Rothstein of the US Bureau of Labor Statistics, *Male prime-age nonworkers: evidence from the NLSY97*, Monthly Labor Review, December 2020.
https://www.jstor.org/stable/26976379?oauth_data=eyJlbWFpbCI6ImZmbWRlYUBnbWFpbC5jb20iLCJpbnN0aXR1dGlvbklkcyI6W119#

WTO, World Trade Statistics Review 2022

Daniel Yergin*, Bumps in the energy Transition,* Finance and Development, IMF, December 2022 edition
https://www.imf.org/en/Publications/fandd/issues/2022/12/bumps-in-the-energy-transition-yergin

Georg Zachmann Pauline Weil and Stephan von Cramon-Taubade, *A European policy mix to address food insecurity linked to Russia's war*, Bruegel Policy Brief December 2022
https://www.bruegel.org/policy-brief/european-policy-mix-address-food-insecurity-linked-russias-war

INTRODUCTION

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1. OPPORTUNITIES FOR A STRONGER EU WITH WAR ON EUROPEAN SOIL

María Martínez Romero

ABSTRACT

Russia's invasion of Ukraine highlighted two important weaknesses of the EU: its energy dependency and the lack of an effective defence structure. The fallout from the war in Ukraine has caused fuel costs and food prices to spike, bringing an old enemy back to the continent: inflation. The year 2023 will be difficult for European citizens, but it will be a year of opportunity to show the relevance of the union. A key concept for the legitimacy of governments at the national and supranational level is responsiveness, the capacity of governments to respond to the needs of their citizens.

This paper focuses on the three main challenges facing the EU in 2023 according to the Eurobarometer: a slowing economy with rising inflation, energy security and European defence. It analyses European and member states' responses in each of these spheres, looks at strengths and weaknesses and explores different policy options that could make the EU exit reinforced from current threats.

European leaders should develop the capacity to respond promptly, forcefully and united to crises. The EU has been fast in making announcements, but not that fast in delivering what it promises. Our speed in crisis responses is hindered by our incapacity to reach agreements. The paper concludes that the EU needs to improve its coordinating skills and get better at fostering rapid consensus. If the EU is incapable to act decisively in a crisis, national governments will act and most likely take divergent routes to shield their citizens. Then, the EU may become an irrelevant international player.

1.1. INTRODUCTION: A DIFFICULT 2023 FOR EUROPEAN CITIZENS, AN OPPORTUNITY FOR THE EU

The year 2022 was supposed to be the year of the European recovery. Following two obscure years marked by the pandemic, in which lockdowns determined the pace of our lives, the European economy was ready for a strong comeback. The macroeconomic fundamentals supported a positive outlook: a resilient labour market which had fully recovered from the pandemic thanks to furlough programs under SURE[1], strong consumer demand after the easing of pandemic restrictions and household savings accumulated during lockdowns ready to be spent. Supply-chain problems were expected to ease in 2022 and the then considered "temporary" inflation would finally slow. The European economy would also be boosted by the disbursements of the generous package of NextGenerationEU, two years after the pandemic hit the continent. The funds were late and would arrive once the economy had already passed the most difficult moments, but they would still accelerate the recovery.

Europeans should have started 2022 full of optimism. But November 2021 brought a new surprise, named Omicron. Lockdowns and restrictions marked Christmas once again and we started the New Year thinking that this pandemic would never end. Luckily, Omicron didn't condition our life for long. Restrictions were eased in February in most European countries. But that month brought a new nightmare to European soil: war. On the 24th of February, Russia launched a large-scale invasion of Ukraine.

This time the EU had to act fast, faster than during the pandemic, much faster than during the financial crisis. An immediate and united response was required. European leaders were united in condemning Russia's brutal attack of a sovereign state and they responded to the attack with surprisingly speed. We saw a faster and more determined union. The summer 2022 Standard Eurobarometer survey shows increased trust of citizens in the EU and continued strong support for the EU's response to the Russian aggression against Ukraine[2].

The EU, member states and financial institutions mobilised over €19 billion in financial, humanitarian, emergency and budget support to Ukraine, according to data provided by the European Commission. Additionally, the EU has adopted eight packages of sanctions against Russia to block the sources of funding of the war, having a quick response to every new aggression. Solidarity was the word defining every action towards Ukraine. European politicians also made sure that they wouldn't repeat past mistakes and refugees were welcomed, with easier and faster mechanisms. So far, European member states have received 7 million Ukrainian refugees fleeing from conflict.

Once again, the EU was in emergency modus. Russia's invasion of Ukraine shifted the priorities in European politics. This wasn't just an attack to its neighbouring coun-

[1] European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE). In April 2020, a total of 33 million employees in Germany, France, Italy and Spain were covered by companies' short-time work applications. This represents 20% of the Eurozone's pre-pandemic labour force. Thanks to these programs, and despite a historic 11.8% contraction in Eurozone economic activity in the second quarter, unemployment rates only increased modestly in most European countries.

[2] When it comes EU actions, humanitarian support is the most approved (92%) followed by welcoming in the EU Ukrainians fleeing the war (90%). 78% of Europeans support economic sanctions imposed by the EU on the Russian government, companies and individuals. Almost seven in ten interviewees (68%) are in favour of financing of supply and delivery of military equipment to Ukraine.

try. It was also an attack to the EU. "This is a war on our energy, a war on our economy, a war on our values and a war on our future," the European Commission's President Ursula von der Leyen said in her State of the Union speech. The conflict set into light two important weaknesses of member states: its energetic dependency on an unreliable autocratic country and the lack of an effective defence structure.

Russian gas accounted for 40% of gas imports to the EU in 2021, and for one quarter of the oil imported. Since the start of the war, President Putin has weaponized the country's vast stores of energy to undermine European support for Kyiv. By mid-September, Russia had cut its supplies by 80% of the 2021 total. Moscow's choking of energy supplies to Europe has driven up production costs, making it harder for some manufacturers to operate economically. Europe's factories aren't alone in seeing a surge in costs as a consequence of the war, European households are also facing sharply higher utility bills. Dependency on Russian fossil fuels comes at a high price.

The fallout from the war in Ukraine has caused fuel costs and food prices to spike, two large components of the inflation basket. The energy crisis has evolved into a cost of living crisis, bringing an old enemy back to the continent: inflation. It wasn't transitory, as most said in 2021. Eurozone inflation reached 10.6% in October. Inflation is here to stay and the European Central Bank has started an aggressive tightening battle against high prices. Amid all these challenges, the economy is slowing down, putting the central bank in the difficult dilemma of taming inflation, without causing a recession. At this point, a Eurozone recession seems unavoidable.

Next year will be a challenging one for Europeans. The war is far from over, energy supplies are at risk, the economy is starting to contract and it will be increasingly difficult for households to make ends meet as inflation continues its upward trend. Russia's invasion of Ukraine has showed the vulnerabilities of the European project, which is still under construction. It has changed the political agenda, putting at the front urgent challenges that the EU can't postpone anymore.

It will be a difficult year for European citizens, but a year of opportunity for European politics. As it happened with the pandemic, the war has accelerated needed transformations that would have otherwise taken decades. The need to react to all these disruptions for the continent also opens a window of opportunity. This crisis shows the need for a deeper cooperation on energy, climate issues, security and defence. We need more EU to confront global challenges, not less.

With the rise of non-liberal powers like China and Russia, the rules-based global order with the U.S. as hegemonic power will be at risk. Some argue that the EU doesn't have a clear role in the new global order. We aren't perceived as a global power, following years of slow responses to crisis, soft power and divisions among the states that form the union. According to Emilio Lamo de Espinosa, the EU can either articulate itself as a unit to take a central role in the governability of the new globalized world or it will take a dependent and secondary role in the global stage[3]. Other powers could dictate our destiny.

[3] Lamo de Espinosa, E. (2021). *Entre Águilas y Dragones: El declive de occidente*. Espasa.

Individual countries don't have the power or the resources to confront current global threats, but united we can show to the world that the EU it's a relevant geopolitical actor. "As a union of almost half a billion citizens, our potential is unparalleled.[4]" As Federica Mogherini says, we are one of the top three global economies, the first trading partner and the first foreign investor for almost every country in the globe.

"The EU must become an anchor of stability for the European continent as a whole," French Europe Minister Laurence Boone said[5]. The European Political Community proposed by French President Emmanuel Macron is a step in that direction, aiming at consolidating European stability through co-operation on foreign policy, trade, research and education.

In conclusion, this year brings the opportunity to the EU to prove to European citizens why it's worthy to be part of the EU, which is better equipped for global challenges than individual European countries. We need to advance towards a union that proves itself useful for its citizens, giving fast and effective responses to their problems.

A key concept for the legitimacy of governments at the national or supranational level is responsiveness, the capacity of governments to respond to the needs of the citizens. If the year 2023 is seen an opportunity to show European citizens the relevance of the union, the Eurobarometer gives as a very clear picture of which should be the top three strategic priorities of European politics: the economy, energy and defence[6]. When asked about the most important issues facing the EU at the moment, 34% of respondents mentioned "rising prices/inflation/cost of living". "Energy supply" and "the international situation" were mentioned by 28% of European citizens.

The EU needs to act fast. Europeans are now united in their support for Ukraine, but as we enter a cold winter in which households will struggle to pay their energy bills and the economy sinks into recession, this support will dwindle. When the citizens feel that neither the supranational, nor the national level can find effective solutions to their problems, they express their discontent by turning their backs to both, the EU and their national governments. A lack of political responses to current challenges would have terrible political consequences. Populism flourishes when citizens lose their faith in a system that is not delivering what they need. But at the same time, as Marc Plattner says, once it arrives it makes democracy even weaker with the spread of anti-democratic values[7].

This paper will focus on the three main challenges the EU is facing in 2023, those that are considered a priority by European citizens: a slowing economy with rising inflation, energy security and European defence. It will analyse European and member states' responses in each of these spheres, look at strengths and weaknesses and explore different policy options that could become an opportunity for the EU to exit reinforced

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4 Mogherini, F. (2016). Foreword to "Shared Vision, Common Action: A Stronger Europe. A Global Strategy for the European Union's Foreign And Security Policy".

5 Boone, L. (2022), "Europe must become a global political power." *Financial Times*. August 25.

6 European Commission (2022). Summer 2022 Standard Eurobarometer.

7 Plattner, M. (2015), "Is Democracy in Decline?" *Journal of Democracy*, Volume 26, Issue 1.

from current threats. Because if there is something that the EU has shown, it is that it emerges stronger from every crisis.

1.2. EU STRATEGIC PRIORITIES FOR 2023

1.2.1. THE ECONOMIC DILEMMA: RECESSION AND INFLATION

After a deceleration in economic growth over the summer, Eurozone indicators deteriorated sharply in September. Eurozone's gross domestic product grew by 0.2% from July to September, easing from the 0.8% expansion registered in the previous quarter. But leading indicators continue to deteriorate and the first GDP contraction is expected in the fourth quarter, the start of a winter recession. The pandemic led to the largest recession since World War II. Just two years later, the Eurozone economy will be sinking again.

The European Commission lowered 2023 growth expectations for the Eurozone economy in November. Gross domestic product in the 19-member states economy is forecast to grow by just 0.3% in 2023, the Commission said in its quarterly report, downgrading its July forecast of a 1.4% expansion[8]. Eurozone economic growth is projected at 1.5% in 2024.

Eurozone consumer confidence fell in September to the lowest level since the survey started, with households especially worried about their financial situation over the next 12 months. Consumers will sharply reduce their consumption, as high inflation erodes their purchasing power and confidence nosedives. The demand side will finish 2022 and start 2023 on a weak footing. In the case of the supply side, the prospects aren't much brighter. A growing number of European companies are reducing production, amid high energy costs and weakening demand. Eurozone industrial production is expected to contract in the coming quarters. Furthermore, firms' efforts to protect their profit margins imply that inflationary pressures may remain high. Households and companies face a difficult 2023.

Inflation reached a record 10.6% year-on-year in October. Eurozone inflation is expected to remain in double-digit levels in the coming months amid high energy prices. A very tight natural gas market over the winter months will keep prices at uncomfortably high levels in 2023. Putin has not only weaponized energy prices, but also food prices, which have also shown above-average increases. Furthermore, price pressures are extending to other categories. Core inflation, which excludes volatile items as energy and food, has been constantly rising.

The European Central Bank has said farewell to negative interest rates and started an aggressive tightening campaign to tame persistently high inflation. Given the continued evidence of price pressures, the ECB is expected to continue raising rates, despite the risks of a deeper recession. The ECB and the rest of the world's central banks are

[8] European Commission. Autumn 2022 Economic Forecast: The EU economy at a turning point. Nov 11.

coordinated in their fast tightening of financial conditions. Amid tight labour markets and sticky inflation expectations, the stampede toward higher rates is expected to continue for a while. "The pivot to lower rates is a story for 2024 rather than 2023," Capital Economics chief U.K. economist Paul Dales said.

Aggressive monetary tightening around the world is spurring fears of a global recession, as the coordination of central banks' actions multiplies the negative effects on growth. Central banks around the world face a difficult dilemma, as their policy tightening to fight inflation will drive economies to deeper recessions. But the commitment and coordination of the world's central banks in raising interest rates shows that combating the effects of sky-rocketing inflation is their priority. The recession is seen as justified short-term pain to gain the battle against inflation.

If a recession is imminent, the question is what will national governments and the EU do to support the economy and to shield businesses and consumers. While monetary policy has been tightening, fiscal policy is going in the opposite direction. Spending by Eurozone governments is expected to reach 51% of the region's economic output in 2022, according to the International Monetary Fund. High government expenditure can exacerbate inflationary pressures and force the central bank to tighten policy by more than would otherwise be necessary, ECB's President Christine Lagarde warns. She insists that government measures to shield business and consumers must be "temporary, targeted and tailored." Governments must show a commitment to bring down public debt ratios, as otherwise, they could face the same market turmoil as the U.K. with Liz Truss' mini-budget.

The EU fiscal rules have been suspended since the start of the pandemic in 2020 but their reinforcement is foreseen in 2024. A reform of the Stability and Growth Pact is expected in 2023, but early communications of the European Commission show that there won't be changes in the provisions of the EU treaty, which states that countries' debt-to-GDP ratio should not exceed 60% and their annual budget deficit should not be higher than 3% of GDP. Enforcement mechanisms will be strengthened in this reform, with lower but effective financial sanctions as well as a possible suspension of structural and NGEU funds in case of non-compliance with the agreed adjustment path, according to the suggestions of the European Commission. Countries need to put their public debt on a downward path before the return of fiscal rules.

The challenge for governments is to balance the need for fiscal consolidation with the urgency to mitigate the shock of higher energy prices. So far, policy responses have come from national governments and have been completely uncoordinated. This fragmentation in the fiscal response is a weakness for the EU. The most controversial case has been that of Germany. To tackle rising gas prices, the German government announced an expansion of its support for households and businesses with a debt-financed package of up to 200 billion euros or 5.5% of GDP. "Germany is using its economic firepower in this energy war" German finance minister Christian Lindner said. The German finance ministry defends its right to use the country's fiscal muscle to protect its citizens. There are two important elements that justify this program. First, Germany has the fiscal capacity to launch this program thanks to years of discipline, so it has earned this "economic firepower." Second, due to its dependency on Russian gas, the economic recession in Germany will be longer and more pronounced than in neighbouring countries, so a larger support package than in other Eurozone countries is required.

However, the announcement raised concerns at the European Commission, as well as among other member states which don't have the fiscal capacity of Germany. "We need to reflect urgently on how to offer member states – which do not have this fiscal room for maneuver – the possibility of supporting their industries and businesses," EU Commissioner Thierry Breton tweeted. European officials also argued that Germany's use of its fiscal power to protect domestic industry threatened to distort and disrupt the EU's single market, by giving the German industry an unfair advantage against its competitors. "No EU member state can offer effective solutions in the long term by going it alone if we are lacking a common strategy, not even those that appear less vulnerable from a financial standpoint," Mario Draghi said.

Germany has valid arguments to defend its actions: it has the need and the capacity to respond strongly to this economic shock. However, this means taking a national perspective, leaving aside the European one. In this energy war against Russia, European countries must show unity. The EU is a weaker enemy for Russia if member states take unilateral responses, which can hurt allies. If Germany subsidizes gas consumption, prices could rise in Europe, making the situation worse for its neighbours. German companies have an advantage over other European companies based in countries with less fiscal capacity. The German package could be justified as a temporary support measure, only until a common European response is found. Furthermore, the details of the package should be designed in a way that collateral damage to other Eurozone countries is minimized. The government measures should also be in line EU emergency measures agreed by EU energy ministers, for example, incentivizing saving gas. Germany can show its "fiscal muscles", but without forgetting that it is part of a team, it is not a solo player.

Cohesion policy has helped to reduce disparities between EU countries, but uncoordinated national fiscal responses could make regional disparities strengthen again. Economic modelling indicates that in 2023, GDP per head will be 2.6% higher in less developed regions due to support from cohesion policy in 2014 to 2020[9]. A fragmented fiscal response to the crisis would put all these advances at risk.

Another key issue is that, apart from being more coordinated, fiscal responses should be better targeted, helping those citizens which need those measures the most. We have a risk of fragmentation not only among European countries, but also within those countries, among their citizens. The cost of living crisis will increase inequalities in our societies if adequate policies aren't in place. Inequality is a dangerous source of instability, with important political consequences. We can't allow the fracturing of our societies.

[9] European Commission (2022). "Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions". *8th Cohesion Report: Cohesion in Europe towards 2050.*

Fracturing is also the word that defines global economic affairs. The US-China trade war, the pandemic and the war in Ukraine will reshape the global economic and financial systems. In the 1990s and 2000s, both policymakers and corporate leaders had a common purpose of increasing economic and financial integration, as it was agreed that this would benefit all. But nowadays, concerns about supply chain vulnerabilities, energy security and, above all, growing animosity between the East and the West are fanning the flames of economic nationalism. The post-Cold war era of hyperglobalization has come to an end, Dani Rodrik and Stephen M. Walt said[10].

With Russia's invasion of Ukraine, we have seen how globalization creates relationships of dependency and how in a conflict, these can be used to weaken the enemy. Russia has weaponized energy and food, while the West has weaponized its control of the economic and financial system. It is therefore clear, that countries will shift their focus to domestic priorities and will try to achieve self-sufficiency in as many sectors as possible. There won't be a complete rollback of globalization, but there will be growing nationalism.

"We are in the early phase of the most profound geo-political shifts the world has seen since the end of the Second World War, promising more abrupt and more dangerous changes to economic structures than what we experienced when the Soviet Union collapsed 30 years ago," said Erik F. Nielsen, Group Chief Economics Advisor at UniCredit Bank[11].

The world economy will coalesce into two blocs centred on the U.S. and on China, causing changes in trade flows, technological exchanges, supply of commodities, migration and financial flows. According to Capital Economics, the fracturing of the global economy into these two blocks might not have a significant impact on the macroeconomic prospects of major advanced economies, all of which are allied with the U.S[12]. However, the politically-driven nature of fracturing will have a significant impact on the operating environment for U.S. and European firms in those sectors that are most exposed to restrictions on trade, such as technology and pharmaceuticals. "Geopolitical considerations will play a greater role in economic policy than they have for a generation," says Jennifer McKeown, Head of Global Economics Service at Capital Economics.

The base case scenario is a partial roll-back of economic integration, with a mild economic impact on advanced economies. The wider reach of the US-led bloc, and the broader networks within in, will help it to adapt to the challenges posed by fracturing better than the China-led block. A less benign scenario is that the US- and China-centred blocs don't hold, and that the global economy splinters into smaller regional or national-level groups. This could entail a rise in supply chain nationalism and a broader pushback against the sharing of technology. The loss of economies of scale

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[10] Rodrik. D., Walt, S. (2022). "How to build a better order," *Foreign Affairs.*

[11] Nielsen, E.F. (2022). Sunday Wrap. Oct. 9

[12] Capital Economics (2022). *The fracturing to the global economy. How the return of geopolitics will reshape economies and markets*.

would result in a larger hit to productivity growth in advanced economies, according to Capital Economics.

"Looking ahead, it is easy to imagine an increasingly U.S. and China, a remilitarized Europe, inward-oriented regional economic blocs, a digital realm divided along geopolitical lines, and the growing weaponization of economic relations for strategic ends," Richard Haass said in an article for *Foreign Affairs*[13].

In this world of deglobalization, with two clear blocks, what is the role of the EU? Uncertainty defines current affairs and an in an uncertain and volatile world, countries will search reliable trading partners when reorganizing supply chains. Countries will search friendly countries with shared values and rules, instead of those having lower costs, as it has happened in the last decades. Reliability will be more valued than affordability. The relationship between the EU and the U.S. will strengthen because there is trust. Countries in emerging Europe can particularly benefit from the transition to this bipolar world, as a safer and more reliable manufacturing hub than countries in Asia.

If economic nationalism triumphs and there are less incentives for economic integration that in previous decades, the EU will always be better-equipped than national governments to confront global challenges and will have more leverage when negotiating with allies or foes. The free movement of people, goods and services in the EU promoted sustained prosperity, especially in the poorest European countries. The economic benefits of joining the EU outweighed any loss of autonomy. In an uncertain world, this will continue to be the case.

1.2.2. ENERGY: TOWARDS A GREENER AND SOVEREIGN ENERGY UNION

Russia's invasion of Ukraine has created a severe energy crisis in Europe. "Energy has largely gone unrecognized as an important cause of the geopolitical and economic fault lines at work," Cambridge professor Helen Thompson says[14]. Since the start of the war, Russia has weaponized energy supplies to the EU, in response to Western sanctions and support to Ukraine. In 2021, the EU imported about 60% of the energy it consumed, with Russia supplying 26% of the oil and 40% of the natural gas we consume[15]. Moscow closed down indefinitely in September the Nord-Stream 1 pipeline, which connects Germany and Russia. The sabotage of the Nord Stream 1 and 2 spurred fears regarding the safety of the gas pipelines from Norway. We will enter the winter with energy security at risk. Europe is paying a high cost for its dependence on Russian energy, while Russia is benefiting from higher prices due to the lower volume of exports. The EU has a foreign energy dependency problem. This dependency has also constrained our capacity of being a global power.

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13 Haass, R. (2022). "The Dangerous Decade: A Foreign Policy for a World in Crisis," *Foreign Affairs*. September/October 2022.

14 Thompson, H. *Disorder: Hard Times in the 21st Century*. Oxford University Press.

15 Eurostat (2022). EU imports of energy products - recent developments

European companies and households will continue struggling with sky-high energy bills in 2023 and energy supplies will be at risk in winter. As cost-of-living pressure intensifies, national governments have approved relief programs to ease the burden on citizens and industry, as we have seen in the previous section. According to Bruegel, 573 billion euros have been allocated and earmarked across EU countries to shield consumers from the rising energy costs since the start of the energy crisis in September 2021.[16]

The "moment of truth" has arrived, as European Council President Charles Michel has defined it. The EU has to act united, with emergency measures to address the energy crisis before a winter in which Russian gas supplies will be drastically reduced. However, there is one headline that resumes the EU response to the energy crisis: "European Union energy ministers failed to reach an agreement". There have been many meetings and many proposals, but in this area, the EU is not acting with the speed that this emergency requires.

Energy has been the EU's Achilles heel in this war, our main weakness. Reducing our dependence on Russian sources of energy has become the agreed priority of European leaders. According to the latest Eurobarometer, 86% of the EU citizens think that we need to reduce our dependency on Russian energy[17].

With this objective, the European Commission adopted the REPowerEU Plan in May, to end this dependence on Russian fossil fuels as soon as possible by saving energy, producing clean energy and diversifying energy supplies. Countries agreed to voluntarily reduce their natural gas demand by 15% to make supply last longer and bring prices down, which could be made temporary in an emergency. There is also a binding requirement for member countries to reduce electricity consumption by at least 5% during selected hours of peak use and governments are expected to set out plans for lowering overall electricity demand by at least 10% over the winter months. Companies and households' capacity of cutting consumption will be key to avoid shortages.

The EU has also been working with international partners to diversify supplies, has secured record levels of import of liquefied natural gas (LNG) and higher deliveries of pipeline gas. As a result, gas imports from Russia had been reduced from 40% to 14% of total gas imports by September. In November, 95% of EU's gas storage was filled, exceeding the 80% target for November. The commission has also proposed a plan for setting up joint purchases of gas. Negotiating together, EU countries could get lower prices and avoid bidding against each other. A good initiative, but for now, just a proposal.

In the sixth package of sanctions, the EU included a partial embargo on Russian oil, banning seaborne imports of Russian crude oil starting the 5th of December and petroleum products as of the 5th of February next year. According to the EU, this will cut oil imports from Russia by 90%. In response, OPEC+, with the lead of Russia and the support of Saudi Arabia, announced a cut in oil production of 2 million barrels

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[16] Sgaravatti, G., S. Tagliapietra, G. Zachmann (2021) "National policies to shield consumers from rising energy prices," Bruegel Datasets.

[17] European Commission (2022). Summer 2022 Standard Eurobarometer.

in November, which would boost oil prices. In retaliation, the Biden administration authorized the release of 15 million barrels from the Strategic Petroleum Reserve, in order to keep prices at bay. Oil has become a war weapon and the EU has just been a spectator in this battle, what should be a wake-up call.

In order to avoid that energy companies benefit from the war while households and businesses struggle with soaring energy bills, the EU will introduce a cap on the extra revenues of companies that produce electricity at a low cost. The EU's plan will redistribute 140 billion euros from energy companies to consumers. The commission will also introduce a temporary tax on the "surplus profits" of fossil fuel companies. According to the commission, the tax could bring in around 25 billion euros of public revenues. EU energy ministers reached a political agreement on September 30th and these measures will apply from December 1st until the end of 2023.

However, EU diplomats are struggling to agree on an emergency price cap on the prices of natural gas and a separate international plan to cap prices paid for Russian oil around the world has equally struggled to ensure agreements. The EU is failing to achieve the needed compromises among Member States that would allow it to advance with its response to the energy crisis.

On the other hand, Russia's invasion of Ukraine can be seen as an opportunity, because it has accelerated the transition to cleaner energies. This had already started on a strong foot, with the terms of the EU Recovery Fund tying a quarter of the money available to member states to green transition projects. "The politics of this decade will be quite incomprehensible outside the drive for green energy.[18]" Renewables are clean, cheap and can be produced domestically, reducing our dependence on imports. In 2021, a combination of primarily hydro, solar, biomass and wind provided 37% of the EU's power, compared with 21% in 2010[19]. The European Commission is proposing to increase the EU's 2030 target for renewables to 45% from the current 40%.

These objectives count with a strong support of European citizens. According to the Eurobarometer, 87% of EU citizens agree that the EU should invest in renewable energies[20]. Our dependence on Russian energy is our main weakens, the support of the citizens for the European green deal is our strength. "For the EU, there is the hope that green energy will prove an escape from the world of oil and gas that through the twentieth century did so much to weaken the European powers.[21]" The conflict has accelerated the transition towards European energy sovereignty.

But this will be a long journey and the citizens need responses in the short-term. Europe faces what is expected to be the most difficult winter in decades. But as the next season approaches, several threats to energy security loom in 2023.

The first one is the risk of running out of supplies, a worst-case scenario for which we need to be ready for with detailed contingency plans. Even if storage facilities for gas

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18 Thompson, H. *Disorder: Hard Times in the 21st Century*. Oxford University Press.

19 Bradshaw, M. (2022). "Putin's gas warfare might galvanize Europe," *Chatham House*.

20 European Commission (2022). Summer 2022 Standard Eurobarometer.

21 Thompson, H. *Disorder: Hard Times in the 21st Century*. Oxford University Press.

are almost full and consumption is down thanks to a mild autumn, if something doesn't go as planned this winter, there could be blackouts and energy rationing, with terrible consequences for the Eurozone economy. An extremely cold winter could lead us to this catastrophic scenario. Low temperatures would drive up demand, reserves would drain and prices would spike. A less windy than usual winter would be detrimental for wind turbines and a cloudy winter would reduce solar power generation. Luckily, the forecasts of the EU-funded Copernicus Climate Change Service in October point to a warmer than usual winter in Europe. A colder than expected winter outside of Europe could also have negative consequences for our energy security, driving international prices up as demand rises and increasing competition among countries for gas and LNG imports.

A second risk would be that we substitute our dependency on Russia for a dependency on other countries, which would lead us to be in the same difficult situation in the future. Most major gas producers, such as Qatar, Azerbaijan or North African countries, are autocracies that are prone to instability and have poor human rights record, Arturo Varvelli of the European Council on Foreign Relations says[22]. "Therefore, turning to those countries to gain independence from Russian energy seems rather short-sighted," he says. We are also becoming more dependent on the U.S., with strong flows of liquefied natural gas helping to replace Russian supplies and fill up storage sites. The U.S. had opposed Nord Stream 2 from the beginning of the project. U.S. officials tried to persuade Europe for years to buy American natural gas as a bulwark against Russia, but most countries stuck with the cheaper Russian supplies. The conflict has benefitted U.S. exporters. Although LNG supplies coming from the U.S. are key to ensure sufficient supply this winter and the U.S. is a more reliable energy supplier, we should see beyond the current crisis and focus in the long-term goals. We can't substitute dependency in Russian gas for dependency in U.S. LNG exports. Our final goal is achieving European energy sovereignty.

An energy union will give us greater leverage when negotiating prices and will accelerate the green transition. European countries could combine their strengths and weaknesses, coordinate infrastructure investments and invest in a more efficient way in the green transition. This conflict has accelerated the needed transformation. "Despite having to weather challenging times in the next couple of winters, the horrible tragedy of war and its impact on European and global energy prices could lead to greater energy security and much needed climate action," Professor Mike Bradshaw says[23]. Our transition to a low-carbon economy could become an example to follow for other countries.

1.2.3. INVESTING MORE AND COORDINATED IN SECURITY AND DEFENCE

When the original members of the EU signed the Treaty of Rome, they instituted an international cooperate that would foster decades of European peace. After the Second

[22] Varvelli, A. (2022). "Burn time: The case for a new European energy union," European Council of Foreign Relations.

[23] Bradshaw, M. (2022). "Putin's gas warfare might galvanize Europe," *Chatham House.*

World War, Europeans understood that the preservation of peace on their continent required a sacrifice of national sovereignty and a commitment to common institutions. For 65 years, there was peace, until Russia started its war of aggression on Ukraine. War returned to the European continent, to the borders of the EU.

The invasion of a sovereign state in European territory set into light the lack of an effective defence system. Suddenly, war was here and we weren't prepare for it. European governments had been spending too little in defence and they had done it in an uncoordinated manner. "We lack the military capabilities to guarantee our own security or serve as a capable partner for NATO," Josep Borrell, High Representative of the EU for Foreign Affairs and Security Policy said in an op-ed[24]. EU countries need to spend more and spend together.

Since the Financial Crisis of 2008, many countries had cut on security spending. Between 2009 and 2018, member states' cuts amounted to an aggregate defence underspending of around €160 billion, Borrell said[25]. A report from the European Commission showed that from 1999 to 2021, EU combined defence spending increased by 20% against 66% for the U.S., 292% for Russia and 592% for China.[26]

Germany's military expenditure represented 2.6% of total government spending in 2020, while it was 11.4% in the case of Russia[27]. Following Russia's invasion of Ukraine, defence spending became urgent. The best example to illustrate it is the historic speech by German Chancellor Olaf Scholz three days after the Russian invasion, known among Germans as the "*Zeitenwende,*" a historic turning point. "The world after this turning point won't be the same as the world before," the Chancellor said. He announced an extraordinary fund of €100 billion to be invested in the modernisation of the German armed forces and promised that defence spending would exceed 2% of GDP, a requirement of NATO that his party had traditionally opposed. Germany's military expenditure as a percentage of GDP has been below 1.5% since 1997, according to World Bank data[28].

It's not only a matter of spending more, but also of spending better. Europe must develop an effective security and defence policy. The lack of collaboration is costing EU countries tens of billions of euros per year because of redundant spending and inefficiencies[29], Borrell said. "We must provide financial incentives for joint procurement and move toward more strategic programming," he said. Member states conducted just 11% of their total equipment procurement in cooperation with other EU member states in 2020, falling well short of the 35% collective benchmark of the European Defence Agency[30].

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[24] Borrell, J. (2022). "Getting Serious About European Defense". Project Syndicate. June 1.

[25] Borrell, J. (2022). "Getting Serious About European Defense". Project Syndicate. June 1.

[26] European Commission (2022). "EU steps up action to strengthen EU defence capabilities, industrial and technological base: towards an EU framework for Joint defence procurement."

[27] World Bank Data. Military expenditure (% of GDP).

[28] World Bank Data. Military expenditure (% of GDP)- Germany.

[29] Borrell, J. (2022). "Getting Serious About European Defense". Project Syndicate. June 1.

[30] European Defence Agency. (2021). Defence data 2019-2020: Key findings and analysis.

Since the war started, the EU had to gear up efforts at strengthening its defence capabilities, as well as supporting Ukraine's efforts to defend itself. The EU has provided €2.5 billion of military assistance to Ukrainian armed forces through the European Peace Facility. The 21st of March, the EU's Strategic Compass for security and defence was approved by member states. The EU has been reinforcing and coordinating national and European investments in defence capabilities and it has established common financing initiatives such as the European Defence Fund, to coordinate research, development and investments.

However, the U.S. is still the largest provider of military assistance to Ukraine, having committed $17.6 billion since the start of the invasion[31]. Some Republicans say that Europeans should do more in this conflict. Following the November midterms, Europeans will be under more pressure to increase its financial and military support to Ukraine. European countries have been reluctant to dedicate 2% of GDP to defence spending, as pledged to NATO, and Republicans insist that they should increase their contributions above that benchmark. This raises the question of what would happen if the U.S. pulled back its support to Ukraine. Would European military assistance be enough? Probably not. The EU depends on the U.S. to defend a sovereign state in Europe. This dependency shows another weakness of the union.

Another reason why the EU is currently in a position of vulnerability is that EU countries' stocks of weapons are depleted, as many of the weapons sent to Ukraine come from the countries' own stocks. Countries need to increase investment in security, to quickly replenish arsenals. "This conventional conflict has in fact shown that the quantity of available boots on the ground, armaments, technology, imagery, communications, as well as the industrial support, continue to be decisive for projecting power on the battlefield," said General Robert Brieger, chairman of the EU Military Committee[32]. Replacing equipment divested to Ukraine should be a short-term priority.

The EU must be prepared for a potential confrontation, while at the same time avoiding any escalation. So far, even amid this exceptionally brutal conflict, each side had sought to prevent higher tension, because that is in the interest of both sides, Dani Rodrik and Stephen M. Walt note[33]. "At the outset, the Biden administration declared that it would not send U.S. troops to fight in Ukraine or impose a no-fly zone there; Russia refrained from conducting wide-spread cyberattacks, expanding the war beyond Ukrainian territory and using weapons of mass destruction." However, as the war has advanced, positions have hardened and the sense of restraint has started to erode.

As Ukraine's military regained ground in the east and the south of the country, Russian president Putin felt increasingly cornered. He then announced the mobilization of 300,000 additional troops, annexed Ukrainian territory and warned that nuclear weapons remain an option if his country's national security is threatened. NATO secre-

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31 U.S. Department of Defense (2022). Fact Sheet on U.S. Security Assistance to Ukraine. October 14.

32 European Defence Agency (2022). "EU's Strategic Compass Follow the ambition." *European Defence Matters*. June 2022.

33 Rodrik. D., Walt, S. (2022). "How to build a better order," *Foreign Affairs*. September/October 2022.

tary general Jens Stoltenberg called it "the most serious escalation since the start of the war". In response, he reiterated that NATO and its partners would continue to support Ukraine.

"Despite the brutal conflict and worrying crises that have broken out since 1945 in various parts of the globe, we have been spared a third world war because we all know only too well that it could mean the end of the history of the world," historian E.H. Gombrich wrote, when talking about the discovery of the "uranium bomb.[34]" In January, the five nations allowed to have nuclear weapons under the UN's Non-Proliferation Treaty (the U.S., the U.K., Russia, China and France) issued a joint statement affirming their commitment not to use nuclear weapons. "A nuclear war cannot be won and must never be fought," the countries said in the statement. Only some months later, Russia was already threatening to break its promises. As Richard Haass says, "the danger today stems from a sharp decline in world order.[35]" Not even international treaties are respected.

On the 23rd of October, Russian defence minister Sergei Shoigu, made phone calls to the defence ministers of France, the U.K. the U.S. and Turkey to tell each of them that Ukraine was planning to detonate a "dirty bomb" on its own territory, in order to blame Russia for the attack. U.S. and European defence officials said that claim could be an indication that the Kremlin plans such an operation. Two weeks later, the United Nations atomic agency said recent inspections in Ukraine found no evidence of activities or nuclear material that hadn't been declared by Kyiv, rebuffing Russian allegations. After the breakup of the Soviet Union, Ukraine gave up the Soviet nuclear weapons that remained on its territory and since then Russia has invaded Ukrainian territory twice. Richard Haas warns that this can persuade other powers that giving up nuclear weapons decreases a country's security[36].

The threat of using nuclear weapons has been constantly repeated by Russia since the conflict started and it has been more frequently repeated as Putin losses battles. World leaders have argued that a nuclear conflict is unlikely because it goes against Putin's interests: Russia could lose China and India's support and it wouldn't help Moscow to achieve its goals. U.S. officials said in October that they hadn't detected preparations for a Russian nuclear strike.

However, global leaders must also be ready to respond if Russia decided to use nuclear weapons. U.S. President Biden said that if Russia were to use a nuclear weapon, there would be a response with "catastrophic" consequences. But neither the U.S. nor NATO have provided details on which would be this response, whether it would be military or nuclear. Security experts explain that we need "vague" deterrence threats, because then countries do not commit to a certain action course and keep flexibility. What is key is that we are ready to execute the threat if deterrence fails.

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[34] Gombrich, E.H. (1985). *A Little History of the World*. Yale University Press.

[35] Haass, R. (2022). "The Dangerous Decade: A Foreign Policy for a World in Crisis", *Foreign Affairs*. September/October 2022.

[36] Haass, R. (2022). "The Dangerous Decade: A Foreign Policy for a World in Crisis", *Foreign Affairs*. September/October 2022.

The use of nuclear weapons must also have severe political and economic consequences for Russia. So far, economic sanctions have been carefully measured to prevent collateral damage on other countries, but following a nuclear attack, Russia should be completely excluded from the international economic order independently of its cost for the global economy. This includes being expelled from international institutions such as the World Trade Organization, the World Bank or the International Monetary Fund. A country that violates international treaties and shows zero respect for the rules-based word order should not benefit from being part of it. Why should Russia keep its seat in the UN Security Council while being a threat for global security?

Contingency plans must be ready in the case of a Russian nuclear strike, so that there is a rapid and coordinated response by the G7 and other concerned countries. The potential response to the use of nuclear weapons, as well as to the threat of its use, is closely watched by other global powers like China or North Korea. We have to set clear precedents for those countries.

In this uncertain and dangerous world, NATO has emerged as an increasingly relevant actor, after many years in which its role was called into question. Three years ago, with Donald Trump in power in the U.S., French President Emmanuel Macron said in an interview to *The Economist*: "What we are currently experiencing is the brain death of NATO.[37]" However, a war in the continent has proved that NATO is key for the security of the Western world. NATO was originally founded in 1949 to defend countries in Western Europe from the Soviet bloc and the conflict in Ukraine has made the alliance return to its original purpose. The threat from Russia has spurred unity among the group of countries. Thanks to this NATO revival in a dangerous geopolitical context, Finland and Sweden have decided to join the alliance.

One of the big obstacles when defining what a stronger EU in defence terms would mean is the disagreement on whether the EU should seek greater autonomy from NATO or NATO should remain the first battle line of our defence system. The Strategic Compass has positioned the EU not as an alternative to NATO, but as a valuable partner, highlighting the need for cooperation between both organizations. There is also a more clear division of labour. The Compass attributes the role of Europe's collective defence clearly to NATO while the EU's focus is on crisis management[38].

The EU needs to develop its military capabilities to be a reliable partner for NATO, the only institution that can guarantee Europe's security[39]. The U.S. calls for the EU to take a greater share of the burden are expected to continue. "The more Europeans invest in their own defence capabilities in the coming years, the more attractive they will become as partners for the U.S.," says Jana Puglierin, from the European Council on Foreign Relations.

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[37] "Emmanuel Macron warns Europe: NATO is becoming brain-dead", *The Economist.* Nov 17th 2019.

[38] European Defence Agency (2022). "EU's Strategic Compass Follow the ambition", European Defence Matters. June 2022.

[39] Hill, F., Stent, A. (2022). "The World Putin Wants: How Distortions About the Past Feed Delusions About the Future", *Foreign Affairs.* September/October 2022.

In definitive, Russia's war of aggression in Ukraine has been a wake-up call for European governments, by underlying our weaknesses in defence and security. However, this can also be seen as an opportunity to strengthen our defence system, which needed urgent reforms in order to fulfil its objective, being able to protect Europeans in an increasingly dangerous world. It's an opportunity to foster European defence cooperation and integration.

The EU underinvested in defence for decades and only three months after the invasion of Ukraine, member states had already announced increases in their defence budgets of close to additional 200 billion euros in the coming years. The war has made us realize that there is an urgent need for increasing investments in defence, as well as investing in a cooperated and strategic way. In the closing ceremony of the conference on the Future of Europe, French President Emmanuel Macron said European governments must be prepared for new forms of conflict, whether they be spatial, cyber or maritime. Robert Schuman, one of the fathers of European institutions, said in the aftermath of World War II, "world peace cannot be safeguarded without the making of creative efforts proportionate to the dangers which threaten it."

1.3. CONCLUSION: A STRONGER EU EMERGING FROM THIS CRISIS

The year 2023 will be very challenging for European citizens, due to the uncertainty stemming from the war and the squeeze on households and businesses revenues' caused by sky-high energy prices. There will be many forces threatening the EU: fragmentation if national governments opt for national responses to the crisis instead of coordinating with other member states, the risk of political polarization with a rise of populism or a rise in political unrest as it becomes more challenging for Europeans to make ends meet. There are many unknowns in this world of "radical uncertainty," in which our understanding of the present is imperfect and our understanding of the future even more limited[40].

What is clear is that the response to this crisis will define our future as Europeans. In this situation, our union basically has two options: passivity or action. The first option, passivity, would have terrible consequences for the European political project, as well as for its citizens. Inaction at the European level would lead member states to act independently or in an uncoordinated way, which would make us a weaker adversary for Russia. If we don't measure up to this challenge, united, we will be condemned to political irrelevance. It could be the end of the European project, which has promoted prosperity in the continent.

The second option is the "Europe of action", as French president Emmanuel Macron defines it. The year 2023 could be seen as an opportunity to strengthen the union, to work together for a better future, to tackle our weaknesses in energy or defence with urgency and to take advantage of our strengths. In this fragmented world defined by

[40] Kay, J., King, M. (2020). *Radical Uncertainty: Decision-making for an unknowable future.* The Bridge Street Press.

uncertainty, we should be the reliable partner for other powers, showing always our strong commitment to human rights, the rule of law, the market economy and democratic values. The EU should focus in output-oriented legitimacy, which is based in positive results for the citizens. It's the moment to show the value of the European project. European leaders should prove a capacity to respond quickly, united and strongly to crises.

However, so far, the responses haven't been as quick, united and strong as they should. The EU has been fast in making announcements, but not that fast in delivering what it promises. We commit to generous support packages for Ukraine, but the disbursements get delayed. The bloc had committed in May to deliver 9 billion euros in exceptional loans to help Ukraine support its 2022 budget. But the EU has postponed to next year the disbursement of one third of the promised support, due to a clash on whether to provide the funds as loans or grants. The EU positively surprised us with NextGenerationEU during the pandemic, but in a similar way, disbursements are taking much longer than initially expected.

Our speed in crisis responses gets hindered by our incapacity to reach agreements. We show unity when we condemn Russia's invasion of Ukraine and we are united in our support for Ukrainian citizens. Nevertheless, when it comes to action, the European Commission proposals find it challenging to gain approvals. It is still extremely difficult to arrive to agreements among countries, which continue to prioritize national interests which can be very diverse in certain areas, as for example, in energy. The EU needs to improve its coordinating skills and get better at fostering consensus, because its ability to remain a relevant geopolitical actor rests in this capacity of achieving unity among 27 member States. If the EU is incapable of giving responses in a crisis and national governments have to take diverging routes to shield their citizens, the EU becomes an irrelevant actor.

We need to invest in our priorities as Europeans. In the short-term, we need to cushion the blow of this severe energy crisis to European households and companies, ensure energy supplies and increase our investments in security following decades of underinvestment. In the medium term, we should find more programs to protect the citizens from economic shocks, as we successfully did with SURE, protecting employment during the pandemic. In energy, we should accelerate our green transition and become an example to follow in the decarbonisation of the economy. In security and defence, we have already seen a change of paradigm, with member states willing to increase their investments. We will have to invest in cooperation, as a union, which will make as stronger and more efficient, with the final objective of disposing of the means to defend ourselves. The EU must become an essential ally for NATO.

Europeans should accelerate the required responses to the crisis, as well as the transformation and improvement of our capabilities. The citizens are showing a strong support for the EU's response to this crisis, the EU can't let them down. We need to capitalize on this support, with ambitious plans for a stronger and more sovereign EU. As Angela Merkel said, Europeans "must take our fate into our own hands." We must fight for our own future, as Europeans. Russia's invasion of Ukraine has been a wake-up call. We live in an increasingly dangerous and unpredictable world. This time Russia is the power causing the crisis, but next time it could be another powerful autocracy. The EU needs to be ready for new challenges.

Every war has winners and losers. This crisis is benefitting the U.S., which is exporting weapons and energy to our continent, while remaining far from the conflict. It is also benefitting China, a country that is quietly observing the conflict from the distance, looking for clues for its strategic goals in Taiwan, taking notes on what happens when a country invades a sovereign state. Meanwhile, European citizens are suffering the consequences of the war. The citizens of Ukraine and Russia will be those in the front line of the terrible damage caused by the war. Those in developing countries are also facing higher prices for food and energy, entering in a bidding war with countries that can pay higher prices. Food insecurity, particularly in Africa, is expected to get worse in 2023.

It is urgent to reduce our dependencies, advancing towards a more sovereign Europe. As the EU moves into 2023, there's an opportunity to become a politically relevant actor, stronger, more efficient, better prepared for future threats. We should continue advancing in our agenda for climate protection, fighting fragmentation, promoting gender equality, solidarity and the rule of law. The path forward seems clear, but the EU needs to get better at building consensus, so that proposals can go into action faster. Improving our efficiency is key for our survival.

This war is one more test for the EU, an opportunity to show that the union is necessary. Jean Monnet, one of the founding fathers of the EU, wrote in his memoirs: "Europe will be forged in crises, and will be the sum of the solutions adopted for those crises." The failure to arrive to agreements when urgent responses are required would condemn the EU to irrelevance. We can exit reinforced from this crisis, but only if we take the right decisions and we work united, as Europeans.

REFERENCES

Boone, L. (2022). "Europe must become a global political power". *Financial Times.* Aug 25.

Borrell, J. (2022). "Getting Serious About European Defense". Project Syndicate. June 1.

Bradshaw, M. (2022). "Putin's gas warfare might galvanize Europe". *Chatham House.*

Breton, T. and Gentiloni, P. (2022). "Nur eine europäische Antwort kann Industrie und Bürger schützen". *Frankfurter Allgemeine.* Oct. 13.

Capital Economics (2022). *The fracturing to the global economy. How the return of geopolitics will reshape economies and markets.*

European Commission (2022). Autumn 2022 Economic Forecast: The EU economy at a turning point. Nov 11.

European Commission (2022). "EU steps up action to strengthen EU defence capabilities, industrial and technological base: towards an EU framework for Joint defence procurement".

European Commission (2022). Summer 2022 Standard Eurobarometer.

European Commission (2022). "Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions". *8th Cohesion Report: Cohesion in Europe towards 2050.*

European Commission, Directorate-General for Budget (2021). "The EU's 2021-2027 long-term budget and NextGenerationEU : facts and figures". Publications Office of the European Union.

European Defence Agency. (2021). Defence data 2019-2020: Key findings and analysis.

European Defence Agency (2022). "EU's Strategic Compass Follow the ambition". *European Defence Matters.* June 2022.

Foy, H., Chazan, G., Sheppard, D. (2022). "G7 says Russian oil price cap to be ready in the coming weeks". *Financial Times.*

Gombrich, E.H. (1985*). A Little History of the World.* Yale University Press.

Instituto Español de Estudios Estratégicos (2015). "Rusia bajo el liderazgo de Putin. La nueva estrategia rusa a la búsqueda de su liderazgo regional y el reforzamiento como actor global". *Cuaderno de Estrategia,* No 178

Kay, J., King, M. (2020). *Radical Uncertainty: Decision-making for an unknowable future.* The Bridge Street Press.

Lamo de Espinosa, E. (2021). *Entre Águilas y Dragones: El declive de occidente.* Espasa.

Macron, E. (2022). Speech for the closing ceremony of the Conference on the Future of Europe. May 10.

Marshall, T. (2015). *Prisoners of Geography.* Elliott and Thompson.

Plattner, M. (2015). "Is Democracy in Decline?". *Journal of Democracy,* Volume 26, Issue 1.

Rahman, M., Santi, F., Hamker, A.C. (2022). "New common borrowing remains unlikely for now, but more possible next year". Eurasia Group.

Rodrik. D., Walt, S. (2022). "How to build a better order". *Foreign Affairs.*

Sgaravatti, G., S. Tagliapietra, G. Zachmann (2021). "National policies to shield consumers from rising energy prices". Bruegel Datasets.

Tagliapietra, S., Zachmann G. and J. Zettlemeyer (2022). "Germany's gas-price 'defence shield': problems and redeeming features". *Bruegel Blog,* 30 September.

Tagliapietra, S., Zachmann G. and G. Sgaravatti (2022). "National policies to shield consumers from rising energy prices". *Bruegel Blog,* 22 September.

Thompson, H. *Disorder: Hard Times in the 21st Century.* Oxford University Press.

Truchlewski, Z., Schelkle, W., and Ganderson, J. (2021). "Buying time for democracies? European Union emergency politics in the time of COVID-19". *West European Politics.*

U.S. Department of Defense (2022). Fact Sheet on U.S. Security Assistance to Ukraine. October 14.

Van Rompuy, Herman. (2010). "The Challenges for Europe in a Changing World". College of Europe EU Diplomacy Paper, February 2010.

Varvelli, A. (2022). "Burn time: The case for a new European energy union". European Council of Foreign Relations.

Von der Leyen, U. (2022). State of the Union Speech.

PART I.

ISSUES IN MONETARY POLICY

2. BAPTISM BY FIRE: THE ECB'S NEW MONETARY POLICY STRATEGY IN THE CURRENT HIGH-INFLATION ENVIRONMENT

Ursel Baumann, Christophe Kamps, Manfred Kremer[1]

ABSTRACT

The Governing Council of the ECB adopted its new monetary policy strategy on 8 July 2021 to adapt to the many structural changes that had occurred over the preceding decades, and in particular to the secular decline in the equilibrium real interest rate. This decline reduced the space available for conventional interest rate policy in the face of disinflationary shocks thus leading to an expansion of the set of policy instruments. In response to these challenges, the new monetary policy strategy adopted an explicitly symmetric 2% inflation target over the medium term. The strategy also acknowledges that, when the economy is operating close to the lower bound on nominal interest rates, it requires especially forceful or persistent monetary policy action to avoid negative deviations from the inflation target becoming entrenched. The inflation environment radically changed only a few months after the conclusion of the strategy review, thus raising the question whether the new ECB strategy is sufficiently well-equipped to guide monetary policy towards a timely return of inflation towards target. The aim of this article is to explain how the ECB's new monetary policy strategy has provided an effective playbook in the current context.

[1] The views expressed in this article are those of the authors and do not necessarily represent the views of the European Central Bank and the Eurosystem. The authors would like to thank Alexandre Carrier for excellent research assistance and the editor, Fernando Fernández, for very helpful comments. The cut-off date for data reported in this chapter was 15 November 2022. The main text was adjusted to also include the ECB Governing Council's decisions of 15 December 2022.

2.1. INTRODUCTION

In 2020-21, the ECB conducted an extensive review of all aspects of its monetary policy, which culminated in the adoption and publication by the Governing Council of the ECB's new monetary policy strategy on 8 July 2021.[2]

Reviewing the strategy was needed to adapt to the many structural changes that had occurred over the preceding decades. The most fundamental of these changes was a decline in the equilibrium real interest rate that keeps the economy balanced between inflationary or disinflationary forces.[3] The estimated equilibrium rate dropped from levels close to 3% at the start of the monetary union to levels close to or even below zero in the period before the COVID-19 pandemic, and reflected secular and still ongoing influences from globalisation, digitalisation and population ageing, reinforced by the legacy of the global financial crisis. This decline reduced the space available for central banks to carry out monetary easing using conventional interest rate policy in the face of disinflationary shocks. As the euro area had been going through a period of persistently low inflation since 2013 (see Chart 1), the ECB therefore resorted to negative policy rates that brought it closer to an effective lower bound on these rates, a limit beyond which further interest rate cuts are expected to lose their ability to provide additional economic stimulus. In this context, many central banks, including the ECB, expanded their set of policy instruments, for instance by adopting asset purchase programmes and providing new forms of long-term financing of the banking sector.

In response to these challenges, the new monetary policy strategy adopted an explicitly symmetric 2% inflation target over the medium term, which is slightly higher than the ECB's previous definition of price stability of below, but close to 2%. Being "symmetric" means that negative and positive deviations of inflation from the target are equally undesirable. Thereby, the inflation target caters well for situations where inflation stands above target as well as for those where inflation is below target. The strategy also acknowledges that, when the economy is operating close to the lower bound on nominal interest rates, it requires especially forceful or persistent monetary policy action to avoid negative deviations from the inflation target becoming entrenched. This may also imply a transitory period in which inflation is moderately above target. It is important to note, though, that the ECB did not adopt an average inflation targeting strategy. Accordingly, it was not the intention to make up for past shortfalls in inflation from target but rather to clarify that the especially forceful or persistent action at the lower bound, by itself and all other things equal, may lead to inflation being somewhat above target for a limited period of time.

[2] See ECB (2021), The ECB's monetary policy strategy statement.

[3] Another slow-moving structural change with potential pervasive consequences is that of climate change, which likely entails severe consequences not only for society and the global economy, but also has implications for the conduct of monetary policy. As a result, the ECB presented an action plan to include climate change considerations in its monetary policy strategy, which was later followed by further concrete steps. (See ECB (2021), 'ECB presents action plan to include climate change considerations in its monetary policy strategy' press release, 8 july, and ECB (2022), 'ECB takes further steps to incorporate climate change into its monetary policy operations', press release, 4 july).

The inflation environment radically changed only a few months after the conclusion of the strategy review, with headline inflation rising above the 2% target in the second half of 2021 and drastically accelerating after the Russian invasion of Ukraine in February 2022, climbing to unprecedented levels over the remainder of the year driven by skyrocketing energy prices (see Chart 1). This unforeseen development marked a fundamental change compared to the environment prevailing before and at the time of the strategy review, with inflation having averaged levels well below the ECB's target over the decade before the recent inflation bout. While it is a coincidence that huge cost-push shocks lifted inflation far above target so soon after the conclusion of the strategy review —and attributing the former to the latter would be akin to the famous "post hoc ergo propter hoc" fallacy—, the current high-inflation environment still raises the question whether the new ECB strategy is sufficiently well-equipped to guide monetary policy towards a timely return of inflation towards target. In this sense, the radically changed environment can be seen as a "baptism by fire" for the new strategy.

By definition, a strategy is designed to provide policymakers with a coherent analytical framework that maps any actual or expected economic developments into consistent policy decisions conducive to the fulfilment of the ultimate objective (price stability over the medium term in the case of the ECB).[4] In principle, a strategy should be robust to possible shifts in the underlying forces shaping the inflation dynamics, thus providing a long-lasting "playbook for handling a wide range of scenarios".[5] When viewed over longer spans of time, however, monetary policy strategies have always evolved gradually in line with theoretical and empirical advancements and experience, reflecting the predominant policy challenges of the times. The aim of this article is to explain how the ECB's new monetary policy strategy —focusing on the price stability aspects of the strategy— has provided an effective playbook in the context of the challenging inflationary environment we are currently in.

2.2. THE ROLE OF ANCHORED INFLATION EXPECTATIONS

2.2.1. THE RELEVANCE OF INFLATION EXPECTATIONS FOR MONETARY POLICY

The ECB's monetary policy strategy statement highlights the essential role of anchored inflation expectations for maintaining price stability. Inflation expectations –

[4] See ECB (2020), 'The review of the ECB's monetary policy strategy', ECB Annual Report, Box 2. Structural changes in the economy require the need to assess periodically the appropriateness of the monetary policy strategy, with the next assessment by the Governing Council expected in 2025.

[5] See P. Lane (2022), 'The monetary policy strategy of the ECB: the playbook for monetary policy decisions', Speech at the Hertie School, Berlin, 2 March 2022. See also P. Hernandez de Cos (2022), 'The European Central Bank's new monetary policy strategy', in Fundación de Estudios Financieros (eds.), 'The euro in 2022' as well as C. Kamps and F. Smets (2022), 'The ECB's new monetary policy strategy', in Bank of Israel (eds.), 'The inflation target in Israel – past, present and future'.

at all horizons – are relevant for monetary policy. At short- to medium-term horizons, inflation expectations are influenced by economic shocks and changes to the economic outlook. At the same time, they are themselves determinants of the inflation generating process, for example by feeding into wage-setting negotiations. How expectations are formed therefore matters for the dynamics of wages and prices.[6] In the case of rational expectations, where expectations are formed optimally and reflect all relevant information available at each point in time, temporary price shocks would fade out relatively quickly. By contrast, in the case of adaptive expectations, by which businesses and households expect future inflation to be a weighsed average of past inflation, inflationary or deflationary shocks can be very persistent. In the latter case, inflation may rise or fall above the central bank's inflation target for an extensive period even in the absence of additional price shocks. How economic agents truly form their inflation expectations probably lies between those two extreme theoretical cases, implying that in particular shorter-term inflation expectations are likely to react to temporary price shocks at least to some degree. In any case, if inflation is expected to remain high for a considerable period of time, workers will demand higher wages to offset the impact of higher inflation on their real incomes. Since businesses will be forced to pass on the cost of higher wages, this will create a second round of rising prices, which —at the extreme— can lead to a self-fulfilling upward wage-price spiral. Vice versa, a long period of below-target inflation bears the risk of this becoming entrenched in expectations and, in the extreme, setting in motion a self-fulfilling deflationary process.

Taken over long-term horizons, inflation expectations are a key gauge of central bank credibility: over such horizons, economic shocks that can drive inflation temporarily away from the inflation target and thus determine inflation developments at business cycle frequency, are assumed to have dissipated. In this case, as long as economic agents trust the central bank to be willing and able to achieve its price stability goal, inflation expectations will remain anchored at the inflation target —in the case of the ECB at 2%— over long-term horizons.[7] A divergence of long-term expectations from the inflation target is thus suggestive of a lack of credibility that the central bank can reach its target over the given horizon. Of particular importance is that the public trusts that the central bank is willing to do whatever is necessary to maintain price stability in the medium term, thereby preserving the regime of monetary dominance that helped central banks to restore price stability after the high-inflation period in the 1970s and early 1980s.[8]

[6] This topic is further investigated in IMF (2022), 'Wage dynamics post-COVID19 and wage-price spiral risks', International Monetary Fund World Economic Outlook, October 2022, Chapter 2.

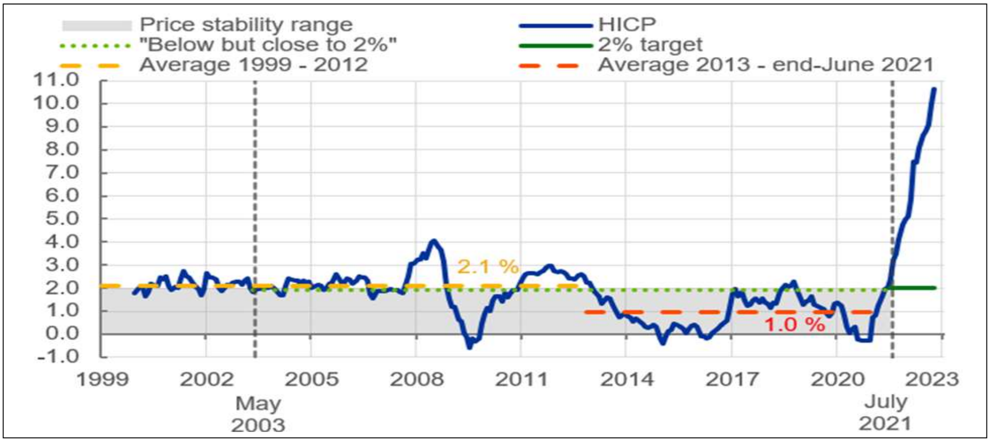
[7] For further discussion of the drivers of expectations at various horizons, see Work stream on inflation expectations (2021), 'Inflation expectations and their role in Eurosystem forecasting', ECB Occasional Paper No. 264.

[8] See I. Schnabel (2022), 'Finding the right mix: monetary-fiscal interaction at times of high inflation', keynote speech at the Bank of England Watchers' Conference, London, 24 November.

2.2.2. THE STRATEGY REVIEW CHALLENGE: HOW TO RE-ANCHOR EXPECTATIONS AT TARGET WHEN INFLATION IS LOW?

When the ECB launched its monetary policy strategy review in January 2020, euro area inflation had averaged only around 1% over the period since the end of 2012 (Chart 1). Under the strategy valid from 2003 to 2021, the ECB had defined price stability as "a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2 percent". Within that definition of price stability, the ECB aimed at an inflation rate of "below but close to 2 percent".[9] The ambiguity around the inflation aim and its perceived asymmetric nature made it less effective when disinflationary forces prevailed following the Global Financial Crisis in 2008-09 and the euro area sovereign debt crisis in 2010-12. Over the following period, there was a clear risk that prolonged below-target inflation risked becoming entrenched in longer-term inflation expectations and, in the extreme, set in motion a self-fulfilling deflationary process. Bringing low inflation up to the ECB inflation aim was thus the key monetary policy challenge until the summer of 2021. Since in proximity to the effective lower bound, interest rate policy was not sufficient to preserve price stability under the prevalence of a sequence of disinflationary shocks, additional policy instruments were introduced between 2014 and 2022 to provide additional policy accommodation. Such instruments included negative deposit facility rates, net asset purchases, longer-term financing operations that provided financing to the banking sector, as well as forward guidance about the future path of policy rates and asset purchases.

Chart 1: Euro area inflation and price stability (annual percentage change).



Source: ECB. Latest observation: October 2022.
Notes: The vertical bars stand for the confirmation and clarification of the ECB monetary policy strategy in May 2003 and the announcement of the ECB monetary policy strategy in July 2021.The shaded area is the price stability range from the previous definition of price stability. The average Jan. 1999 - Oct. 2022 is 2.07%.

[9] ECB (2003), 'The ECB's monetary policy strategy', press release, 8 May.

Against this background, the Governing Council in July 2021 decided to introduce a symmetric inflation target of 2% that provides an unambiguous anchor for longer-term inflation expectations. This raises the question: to what extent have inflation expectations become more firmly anchored at the 2% inflation target in the (immediate) aftermath of the announcement of the new strategy? Various pieces of evidence are consistent with the 2% symmetric inflation target having indeed contributed to a more solid anchoring of longer-term inflation expectations. To assess this question, it is important to focus either on developments that immediately followed the announcement or on surveys that are designed to assess the 'pure' impact of the new strategy. This should help correct for the effect from other factors, such as actual inflation developments, that are also likely to have influenced expectations since summer 2021. Starting with surveys of professionals, following the announcement of the new strategy, the ECB Survey of Monetary Analysts (SMA) showed a noticeable increase in the percentage of respondents expecting long-run inflation at 2%, together with a corresponding decline in the percentage of respondents expecting inflation below 2% (see Chart 2).[10] Whereas a large majority of SMA respondents had expected the ECB to undershoot its inflation target over the longer term before the change in strategy, as of early 2022 a large majority of respondents has been expecting inflation to be consistent with the 2% target over the longer term. Latest survey rounds are also consistent with the ECB's commitment to symmetry as the share of respondents who expect target undershooting (yellow line) and the share of those expecting target overshooting (red line) have been roughly equal since spring 2022. These findings are corroborated by a special Survey of Professional Forecasters (SPF) conducted in the fourth quarter of 2021, aimed at evaluating the impact of the ECB's new strategy. SPF respondents, on balance, revised their longer-term inflation expectations moderately upwards, with the balance of risks surrounding these expectations coming closer to symmetry. In addition, SPF respondents reported that the new strategy will make it more likely that that the ECB will meet its mandate and primary objective of price stability in the euro area over the medium term.[11]

As regards the expectations of private households, the August 2021 Bundesbank Online Panel Households asked around 3000 German households questions about their inflation expectations for the next two to three years in a randomised control trial and made a direct link to the ECB monetary policy strategy.[12] The survey responses suggested that under the new ECB inflation target, households expect slightly higher inflation than under the previous inflation aim, especially among a distinct group of households that were provided the additional information on the nature of the new strategy's in-

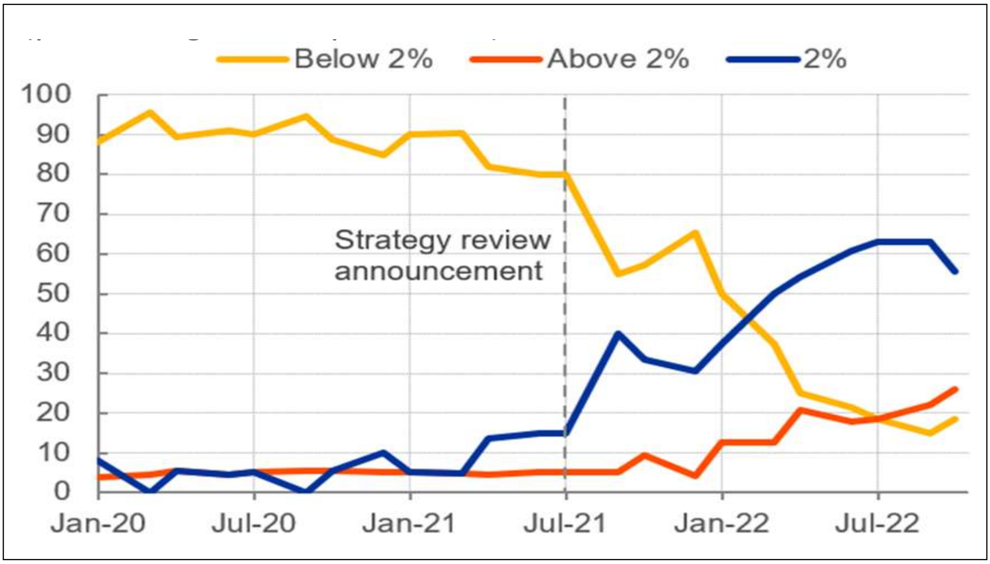
[10] See U. Baumann, C. Kamps and M. Kremer (2022), 'The ECB's new inflation target one year on', ECB blog post, 10 August.

[11] See ECB (2021), 'Results of a special survey of professional forecasters on the ECB's new monetary policy strategy', ECB Economic Bulletin, Issue 7.

[12] See M. Hoffmann, L. Pavlova and G. Schultefrankenfeld (2021), 'The effects of the ECB's new inflation target on private households' inflation expectations', Deutsche Bundesbank Research Brief, 43rd edition, November.

flation target. In particular, medium-term inflation rates below 1% and above 3% were seen as less likely than under the previous strategy, suggesting that the new strategy removed previously perceived ambiguities.

Chart 2: Evolution of monetary analyst's long-run inflation expectations over survey rounds (percentage of respondents).



Source: ECB Survey of Monetary Analysts (SMA) (all vintages from January 2020 until October 2022 results).
Notes: The three groups are based on the Harmonised Index of Consumer Prices long-run point forecasts provided by respondents on the macroeconomic projections question of the SMA. 2% is calculated as inflation expectations between 1.95% and 2.05%. The number of respondents to the October 2022 SMA was 27. The latest observation (SMA) is for October 2022.

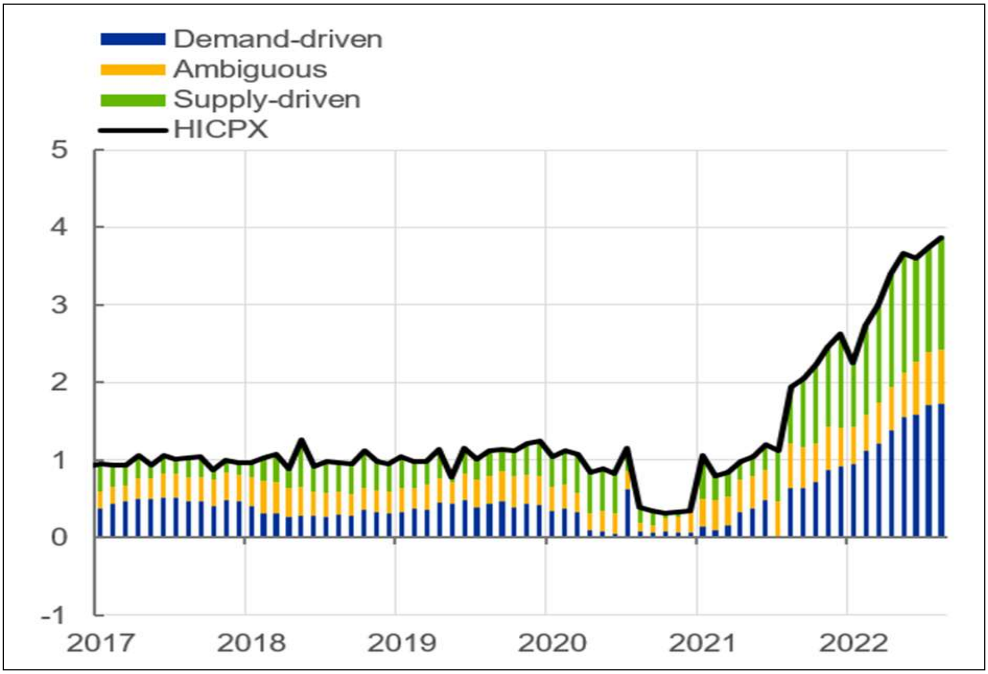
All this evidence is consistent with a firmer anchoring of inflation expectations at 2% by various agents after the announcement of the ECB's symmetric 2% inflation target. At the same time, an analysis based on information treatments in the ECB's Consumer Expectations Survey[13] suggests —at least for consumers— that it is difficult to make this information stick and thus the effect to persist. According to this analysis, to influence consumers' expectations, the first challenge is to make sure that the information about the ECB's new inflation target reaches consumers. Second, once the relevant information has reached consumers, it only makes a lasting difference if the information is provided as part of a more complete explanation of the economic background, including an explanation of how an inflation target helps to stabilise the economy and contributes to economic growth and employment.

[13] See M. Ehrmann, D. Georgarakos and G. Kenny (2022), '[Can the ECB gain credibility by explaining its strategy?](#)', The ECB Blog, 24 August.

2.2.3. *TODAY'S CHALLENGE: HOW TO KEEP INFLATION EXPECTATIONS ANCHORED AT 2%?*

Since summer 2021, inflation in the euro area has moved higher and persistently surprised on the upside. Outturns of headline HICP inflation have been above the 2% target since July 2021, and by an increasing magnitude over time (see Chart 1). While initially, the rise in inflation was largely seen as transitory and related to supply bottlenecks associated with the pandemic, over time, price pressures broadened, with also core inflation rising above 2% in October 2021, and more significantly so since the start of the Russian invasion of Ukraine in February 2022. Chart 3 shows a model-based decomposition that identifies predominantly supply-driven vs predominantly demand-driven components of core HICP inflation.[14] This is done by assessing the er-

Chart 3: HICPX inflation – decomposition into supply and demand-driven factors (annual percentage changes).

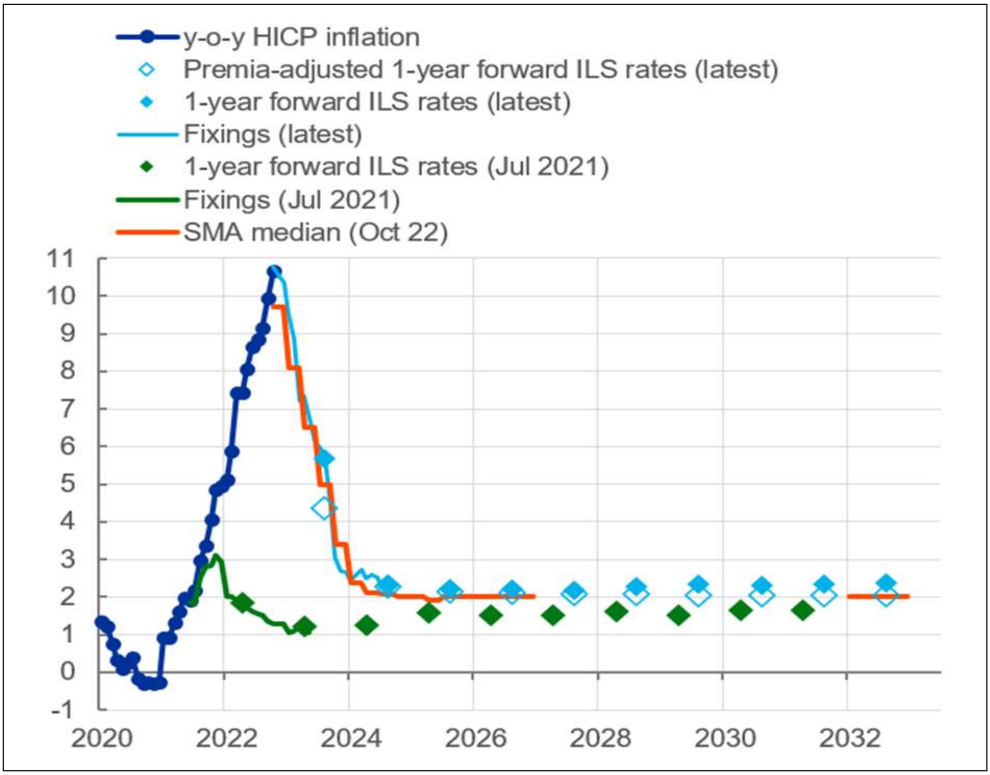


Source: Eurostat and ECB calculations, Gonçalves and Koester (2022).
Notes: Seasonally adjusted data. Based on Shapiro, A.H. (2022), 'Decomposing supply and demand drive inflation', Federal Reserve Bank of San Francisco Working Paper, September. HICPX inflation is the sum of demand-driven, supply-driven and ambiguous components calculated as the trailing sum of the last 12 monthly contributions. While price data are available for October 2022, the latest observation is for August 2022 as the turnover series used as a proxy for activity are published with some delay.

[14] See E. Gonçalves and G. Koester (2022), 'The role of demand and supply in underlying inflation – decomposing HICPX inflation into components', ECB Economic Bulletin Issue 7, Box 7.

rors of a time series model at each point in time: if the errors in prices and activity have the same sign, the component is labelled "demand-driven", otherwise it is labelled "supply-driven". Once classified, the individual contributions of components are aggregated using consumption weights to derive the monthly decomposition of core inflation. The analysis suggests that the rise in core HICP inflation was initially mainly supply-driven, in line with the observed sequence of supply shocks (with the impact of the Russian invasion of Ukraine on energy supply and agricultural commodities coming on top of earlier supply bottlenecks). Meanwhile, the importance of demand factors has gradually increased over time, with the rebound in demand reflecting the lifting of pandemic restrictions. In recent months, supply and demand factors have played broadly similar roles in fostering inflationary forces. In response to such developments, central banks have had to shift their focus from tackling low inflation to combating high inflation.

Chart 4: Market-based measures of inflation compensation and surveys (annual percentage changes).



Sources: Bloomberg, Refinitiv, SMA and ECB calculations.
Premia-adjusted forward inflation-linked swap (ILS) rates are average estimates from two affine term structure models as in Joslin, Singleton and Zhu (2011), 'A new perspective on Gaussian dinamic term structure models", Review of Financial Studies', 24(3), pp. 926-970, applied to ILS rates non-adjusted for the indexation lag; see V. Burban, B. De Backer, F. Schupp and A. Viadu (2022), 'Decomposing market-based measures of inflation compensation into inflations expectatives and risk premio', ECB Economic Bulletin, Issue 8/2021, Box 4. Latest observation: 15 November 2022.

Of particular importance for monetary policy at the current juncture is to ensure that currently high inflation does not produce second-round effects that cause too-high inflation to become entrenched.[15] If inflation expectations became de-anchored and engrained in wage negotiations and price setting, this could lead to a wage-price spiral which in turn would sustain the de-anchoring. Since the euro area is a net importer of energy, there is a large and unavoidable loss in real income owing to the deterioration in the euro area's terms of trade (around 2% of GDP in the second quarter of 2022). To some extent, fiscal policies can cushion the impact of this shock, especially for the most vulnerable. In addition, some "catching up" of wages is likely, since —with, so far, resilient labour markets— conditions are in place for workers to recoup parts of the losses in their real income. Incoming wage data and recent wage agreements indicate that wage growth is indeed picking up, although from moderate levels and so far not suggesting acceleration towards levels endangering the return of inflation to the ECB's target over the medium term. Going forward, it is important that firms and workers in the euro area accept that all of them will have to bear part of the national income losses brought about by the terms of trade shock.[16] The ECB may help coordinating economic agents to such a responsible wage- and price-setting behaviour by clearly communicating and demonstrating that it will not accommodate wage and price claims considered as inconsistent with the ECB's medium-term inflation target. The experience with monetary policy of the 1970s and 1980s clearly shows the significant macroeconomic costs of stopping wage-price spirals once they have set in.

In view of persistently high inflation, the risk of longer-term inflation expectations overshooting the 2% target also requires the ECB's close attention. During the first months of 2022, it became increasingly clear that, even when supply shocks fade, the disinflationary dynamics of past decades were unlikely to return.[17] In line with this shift, the ECB Governing Council's April 2022 Monetary Policy Statement stated that "initial signs of above-target revisions in those [inflation expectations] measures warrant close monitoring". Although most measures of longer-term inflation expectations have remained at around 2% until recently, some indicators have started to move moderately above the ECB target.

The Survey of Professional Forecasters expectations for the longer term moved upwards from 1.8% in the third quarter of 2021 to 2.2% in 2022Q3 and stayed unchanged in Q4. Similarly, the 5-years' ahead Consensus Economics survey reached 2.1% in 2022Q3, also remaining unchanged in Q4, while the SMA survey has been stable at 2% since 2022Q2 (see Chart 4). In line with professional surveys, also market-based

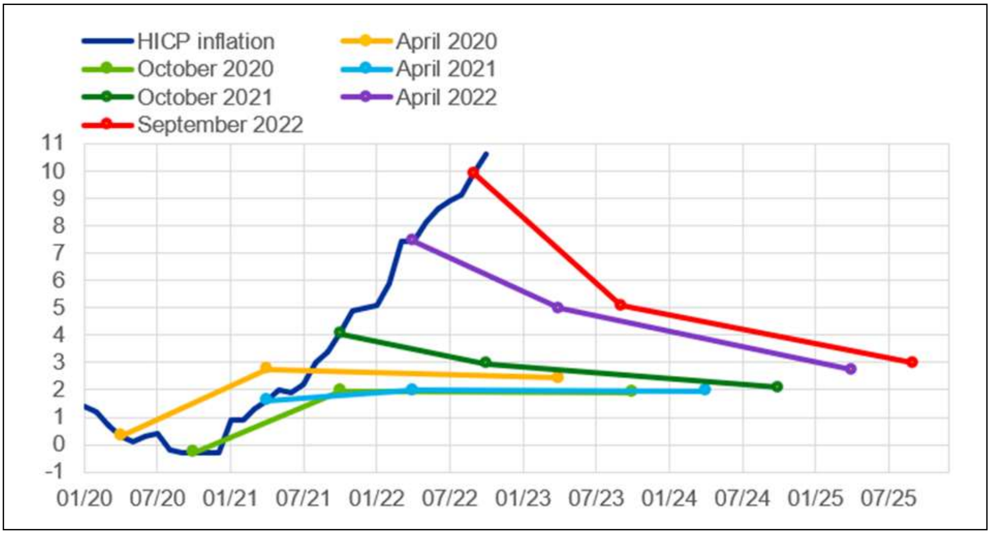
[15] See C. Lagarde (2022), 'Monetary policy in a high inflation environment: commitment and clarity', Lecture organised by Eesti Pank, Tallin, 4 November.

[16] It is natural that wages will to some extent catch up the loss in purchasing power due to the negative terms-of-trade shock. However, the appropriate speed and scale of the catchup adjustment process must strike a balance between improving living standards and ensuring that employment is not threatened by a failure to adjust to the terms of trade shock. See P. Lane (2022), 'Inflation diagnostics', ECB blog post, 25 November.

[17] See C. Lagarde (2022), 'Monetary policy normalisation in the euro area', ECB blog post, 23 May.

measures of inflation compensation at longer term horizons have increased somewhat above 2%. For example, the five-year inflation-linked swap forward rate five years ahead moved upwards from 1.6% on 8 July 2021 to 2.3% in mid-November 2022. It is important to note, however, that inflation compensation embodied in market prices do not only reflect genuine expectations, but also risk premia that compensate investors for the uncertainty surrounding their expected inflation.[18] In addition, market-based indicators may be influenced by other factors that could distort their signal, such as liquidity conditions, thus not providing a clean or direct gauge of market participants' inflation expectations. Correcting for these factors suggests that marked-based genuine inflation expectations have so far remained consistent with the ECB's 2% inflation target.

Chart 5: Term structure of median inflation expectations (percent; annual percentage changes).



Source: ECB's Consumer Expectations Survey and Eurostat.
Notes: The chart shows median consumers' inflation expectations at different horizons, over time. The lines are constructed by combining information about inflation expectations one year ahead and three years ahead for selected monthly waves of the CES. Latest observation: September 2022 for inflation expectations, October 2022 for HICP.

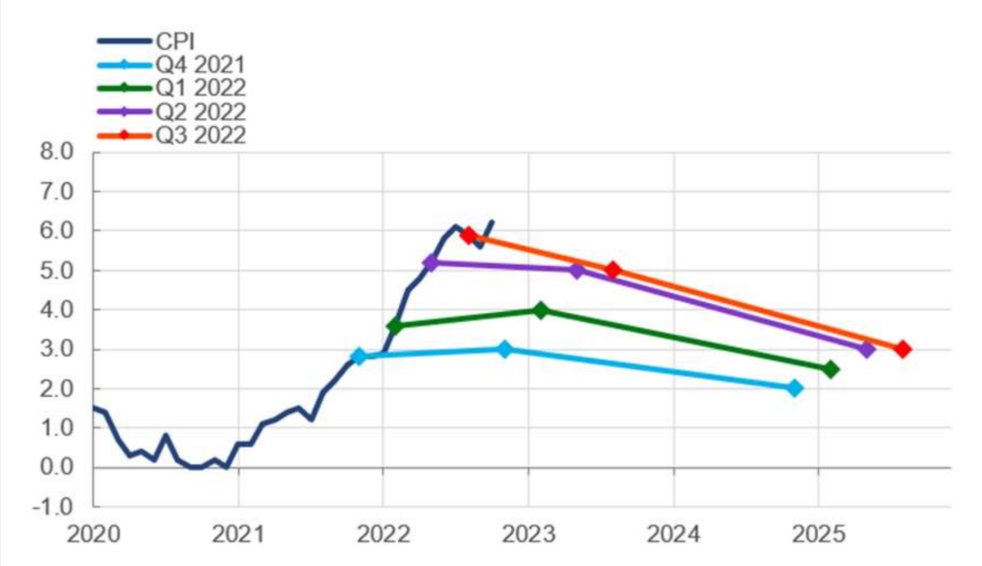
The expectations of consumers over medium-term horizons have also gradually moved higher since the Russian invasion of Ukraine. According to the ECB Consumer Expectations Survey, median inflation expectations of euro area consumers three years ahead increased from 2% to 3% in March 2022, and —despite further increases in headline inflation— have remained relatively stable since then. At the same time,

[18] For further details on a model-based approach to estimate the two components of market-based measures of inflation compensation —inflation expectations and risk premia— see V. Burban, B. De Backer, F. Schupp and A. Vladu (2022), 'Decomposing market-based measures of inflation compensation into inflation expectations and risk premia', ECB Economic Bulletin, Issue 8/2021, Box 4.

consumers continue to expect the current spike in inflation as having a transitory component, with inflation falling back over time, albeit staying at levels above 2% three years out. This is shown by the term structure of consumers' inflation expectations that can be constructed by combining information on inflation expectations at different horizons, see Chart 5.[19]

One area for future research identified in the ECB's monetary policy strategy review was to address the lack of information on firms' inflation expectations at the euro area level. At present, information is available only for a few euro area countries. Chart 6 shows inflation expectations drawn from a survey of French firms conducted by the Banque de France.[20] The responses to this survey also indicate some increase in the 3-5 year forward inflation expectations of firms from 2.0% in 2021Q4 to 3.0% in 2022Q2 and Q3. However, consistent with the evidence for consumers, also business leaders' inflation expectations follow a downward-sloping term structure.

Chart 6: Term structure of median business leaders' inflation expectations (France) (annual percentage changes).



Source: Banque de France's Business Survey.
Notes: The chart shows median business leaders' inflation expectations (defined here as the increase in the consumer prices index) at different horizons, over time. The lines are constructed by combining information about 1- and 3-5 year ahead inflation expectations. Latest observation: Q3-2022 for inflation expectations, October 2022 for CPI.

[19] This chart was taken from L. Gornicka, J. Meyer and A. Meyler (2022), 'A closer look at consumers inflation expectations – evidence from the ECB's Consumer Expectations Survey', ECB Economic Bulletin Box, Issue 7/2021.

[20] See Banque de France (2022), 'Inflation expectations 2022Q3', 29 September.

2.3. THE ECB'S POLICY RESPONSE IN VIEW OF THE FLEXIBLE MEDIUM-TERM HORIZON

The ECB's monetary policy response to the evolving medium-term inflation outlook can be well rationalised based on the new strategy. Three main periods can be distinguished: an initial phase covering most of the second half of 2021, during which the monetary policy stance remained highly accommodative; a second phase starting in December 2021 when the ECB embarked on a monetary policy normalisation path; and an upcoming third phase when monetary policy will enter restrictive territory as announced at the ECB's monetary policy meeting on 15 December 2022.

When looking at the first phase it is important not to succumb to the temptation of hindsight bias. At the time of the conclusion of the strategy review, inflation had been well below the target for a very long period of time and policy interest rates had been at the lower bound for long, too. This is a situation for which the strategy prescribes that monetary policy accommodation should be "especially persistent" to counter those forces that had kept inflation expectations below the 2% target. When inflation started to rise above the target in the second half of 2021, it was initially not clear that this rise would prove persistent as it was partly driven by factors such as supply bottlenecks which were expected to dissipate rather quickly. While measures of underlying inflation did also rise, these stayed at rather moderate levels throughout 2021. At that time, it was thus not yet evident that inflation expectations would durably re-anchor at the new target level, suggesting that monetary policy had to show a degree of patience initially. For example, as shown in Chart 2, a majority of monetary analysts up until end-2021 expected inflation to be below 2% over the longer term.

The second aspect supporting the policy stance in the second half of 2021 is the flexible medium-term orientation of monetary policy, which allows for inevitable short-term deviations of inflation from target, as well as lags and uncertainty in the transmission of monetary policy to the economy and to inflation. According to the strategy, the flexibility of the medium-term orientation takes into account that the appropriate monetary policy response to a deviation of inflation from the target is context-specific and depends on the origin, magnitude and persistence of the deviation. While demand shocks tend to move inflation and real economic activity in the same direction, supply shocks create a temporary trade-off.[21] In the case of isolated, temporary supply shocks that may dissipate of their own accord, the flexible medium-term orientation can be used to avoid unnecessary volatility in real activity and employment. For such shocks, the literature concludes that it is optimal for the central bank to tolerate some fluctuations of inflation around its inflation target in order to reduce fluctuations of output and employment.[22] In the presence of

[21] For further discussion and analysis of the ECB's medium-term orientation, see Work stream on the price stability objective (2021), 'The ECB's price stability framework: past experience, and current and future challenges', ECB Occasional Paper Series No. 269.

[22] See e.g. O.J. Blanchard and J. Galí (2010), 'Labor markets and monetary policy: a new Keynesian model with unemployment', *American Economic Journal: Macroeconomics,* 2(2), pp. 1-30.

material trade-offs, a medium-term policy horizon which caters for employment without compromising the primacy of price stability can lead to more favourable outcomes in terms of welfare than a short-term horizon focused on strict inflation stabilisation.[23] Based on these considerations, the ECB's new strategy confirmed the medium-term orientation of monetary policy, which has served the Governing Council well in responding flexibly to economic shocks since the start of EMU.

Initially, the unexpected rise in inflation was indeed largely seen as transitory and —as described above— mainly caused by supply bottlenecks, such as the temporary closure of port terminals. Such supply shocks tend to push inflation higher and economic activity and employment lower. In cases like this, the medium-term orientation allows to look through temporary shocks whose effect on inflation is expected to dissipate over the medium term. This avoids pronounced falls in economic activity and employment, which, if persistent, could themselves jeopardise medium-term price stability.[24] However, 'looking through' is a viable option only as long as inflation expectations remain well-anchored.

With time, it became increasingly evident that the price impacts of the supply shocks were not purely transitory. Instead, there were increasing signs of persistent inflationary effects to which monetary policy needed to react.[25] In response to the broadening of inflationary pressures that could be observed in the incoming data, the ECB began normalising monetary policy in December 2021, with the decision to end net purchases under the Pandemic Emergency Purchase Programme (PEPP) at the end of March 2022. Later, the initial signs of above-target revisions to inflation expectations as well as the June staff projections, that suggested HICP inflation would remain above 2% until the end of the projection horizon up to 2024, paved the way for further steps on

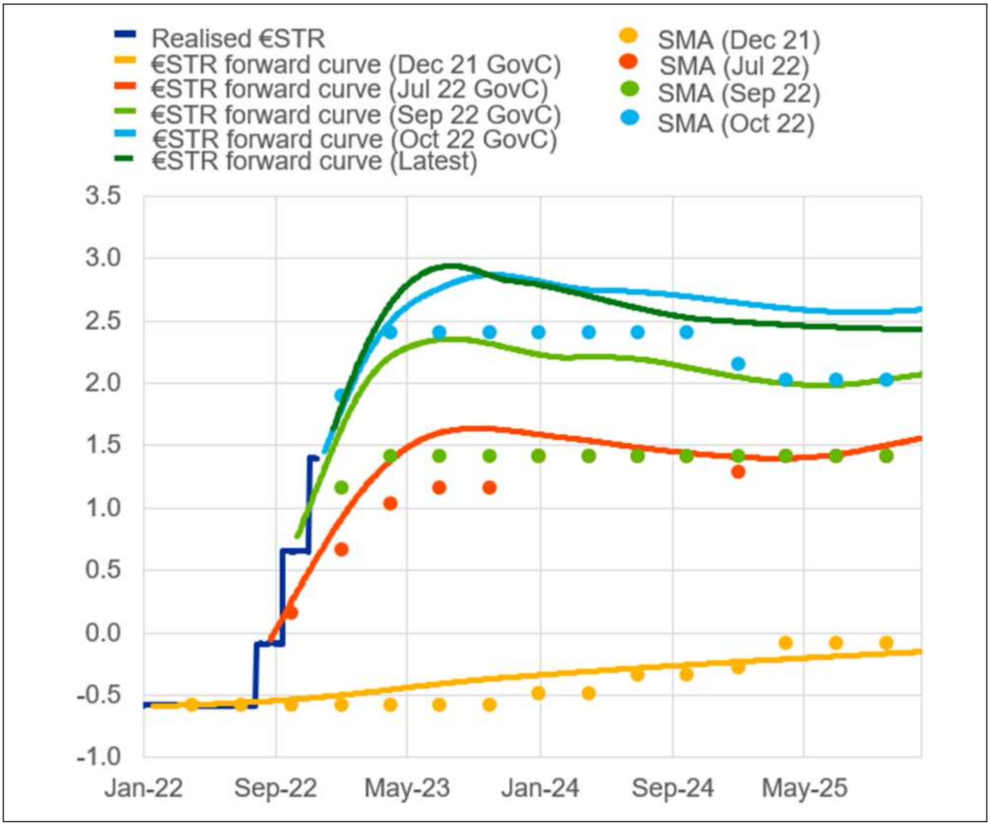
[23] See Work stream on employment (2021), 'Employment and the conduct of monetary policy in the euro area', ECB Occasional Paper Series No. 275, box 6.

[24] The ECB's process of monetary policy normalisation also considers the changing nature of the predominant financial stability risks in the new macroeconomic environment. As explicitly recognised in the new monetary policy strategy, the medium-term orientation also allows the ECB to take into account financial stability considerations in view of the interdependence of price stability and financial stability, while recognising that macroprudential and microprudential policies are the first line of defence to safeguard financial stability. During the period of persistently low inflation and accommodative monetary policy, the ECB closely monitored the potential build-up of financial vulnerabilities in the light of generally increased credit growth and elevated asset prices. It did so because financial stability is a precondition for price stability. In case systemic risks materialised into a financial crisis over the medium term, the ensuing output losses would pose a threat to medium-term price stability. But the current high-inflation environment emphasises the reverse case, namely that price stability is a precondition for financial stability. The asset pricing impacts of high and volatile inflation, and the effects of tighter monetary policy required to curb inflationary pressures, typically imply increased short-term financial stability risks as embodied in tighter, more volatile and uncertain financing conditions. On the other hand, previously existing medium-term financial vulnerabilities will be reduced. In light of these considerations, when normalising its monetary policy, the ECB takes due account of the potential short-term and medium-term financial stability risks entailed by its policy moves.

[25] In the recent Karl Otto Pohl lecture President Lagarde elaborated on the types of shocks the euro area has faced, see C. Lagarde (2022), 'Monetary policy in the euro area', 20 September.

the path of policy normalisation. This included the June 2022 decision to end net purchases under the asset purchase programme (APP) as of 1 July 2022, the confirmation that the rate forward guidance criteria introduced on 22 July 2021 were satisfied (see Section 4 for further discussion), followed by increases in the ECB's key policy rates by cumulatively 250 basis points at the July, September, October and December Governing Council meetings (see Chart 7).

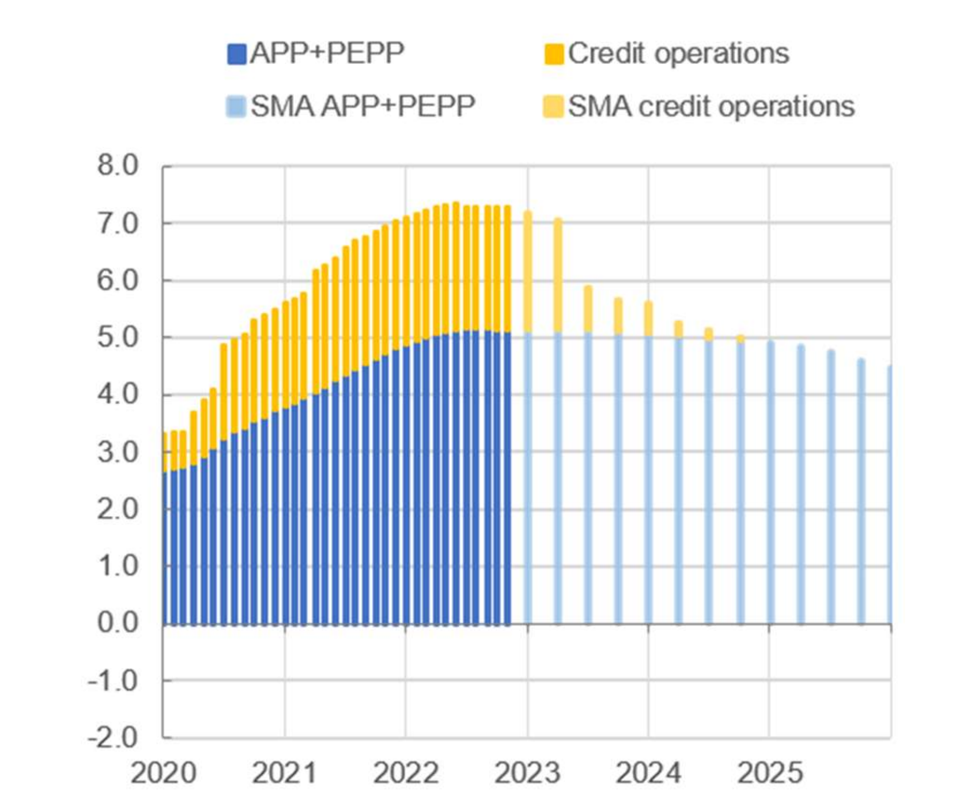
Chart 7: €STR forward curve and survey expectations on the deposit facility rate (percentage per annum).



Sources: Bloomberg, Refinitiv, SMA and ECB calculations.
Notes: The dots depict the median of responses to the SMA on most likely future deposit facility rates (DFR). SMA stands for Survey of Monetary Analysts. Surveys are adjusted for the €STR vs. DFR spread. The latest observation is 15 November 2022 for realised €STR.

While up to the December 2022 Governing Council meeting, monetary policy had largely been on a normalisation path, at that meeting the communication changed, suggesting that interest rates will need to rise to restrictive levels to reduce inflation by dampening demand and guard against the risk of a persistent upward shift in inflation expectations. This took place against the background of December Eurosystem staff projections showing a significant upward revision to the expected inflation path, with inflation projected to stay above the target until well into 2025. Against this background, the Governing Council judged that interest rates would still have to rise significantly at a steady pace to reach levels that were sufficiently restrictive to ensure a timely return of inflation to the 2% medium-term target. Moreover, the Governing Council also announced principles for normalising the Eurosystem's monetary policy securities holdings, while stressing that —in line with the strategy— the set of ECB policy rates remain the primary monetary policy instrument. The principles foresee a decline in the APP portfolio that occurs largely in the background, at a measured and predictable pace amounting to €15 billion per month on average from the beginning of March 2023 onwards, until the end of the second quarter of 2023, with its subsequent pace to be determined over time.

Chart 8: Refinancing operations and bond holdings: data and survey expectations (Trillions of €).



Source: SMA and ECB calculations.
Notes: Asset purchases comprise holdings under the APP and PEPP, expressed in book value. Credit operations reflect long-term lending operations (TLTROs). Projected values for asset purchases and credit operations are from the October 2022 ECB SMA. Latest observation: October 2022.

Ever since embarking on the monetary normalisation process in December 2021, the Governing Council had made clear that flexibility in the design and conduct of asset purchases would remain an element of monetary policy to address threats to monetary policy transmission. In light of severe market tensions, the Governing Council on 15 June 2022 decided to apply flexibility in reinvesting redemptions coming due in the PEPP portfolio. In addition, in July 2022 the Governing Council decided to introduce the Transmission Protection Instrument (TPI) to support the effective transmission of monetary policy, ensuring that along the normalisation path the monetary policy stance is transmitted smoothly across all euro area countries.[26] The TPI is an addition to the ECB's toolkit that can be activated to counter unwarranted, disorderly market dynamics that pose a serious threat to the transmission of monetary policy across the euro area. The Governing Council also clarified that any purchases under the TPI would be conducted such that they cause no persistent impact on the overall Eurosystem balance sheet and hence on the monetary policy stance.

In line with its commitment to stand ready to adjust all of its instruments within its mandate to ensure that inflation returns to 2% over the medium term, the Governing Council on 27 October 2022 also decided to change the terms and conditions of the third series of targeted longer-term refinancing operations (TLTRO III). During the acute phase of the pandemic, this instrument had played a key role in countering downside risks to price stability. In the meantime, however, in view of the unexpected and extraordinary rise in inflation, there was a need to recalibrate it to ensure that TLTRO III were consistent with the broader monetary policy normalisation process and to reinforce the transmission of policy rate increases to bank lending conditions. The Governing Council therefore decided to adjust the interest rates applicable to TLTRO III from 23 November 2022 and to offer banks additional voluntary early repayment opportunities. Early repayments made after the decision, on 23 November and 21 December 2022, amounted to €743.8 bn in total, leading to a faster reduction in the Eurosystem balance sheet than analysts had expected before the TLTRO adjustment (see Chart 8), thereby contributing to the overall monetary policy normalisation and also helping to alleviate collateral scarcity concerns that had become apparent in repo markets over previous months.

2.4. THE EVOLUTION OF ECB FORWARD GUIDANCE AFTER THE INTRODUCTION OF THE MONETARY POLICY STRATEGY

This section zooms in on the ECB's forward guidance on nominal interest rates, which had played a prominent role in the low-inflation environment preceding the strategy review and did so also in the twelve months following the review conclusion.[27]

[26] See ECB (2022), 'The Transmission Protection Instrument', 21 July.

[27] For an assessment of the impact of forward guidance during the low-inflation period as well as a discussion of the complementarities between the various types of non-standard monetary policy measures

In the low-inflation environment, forward guidance – initially qualitative in nature – was introduced in July 2013, largely to shield euro area financing conditions from upward pressure and volatility emanating from the United States. Forward guidance was later adapted to include time-based and state-dependent elements, and with forward guidance on the APP chain-linked to the evolution of key policy rates (see Table 1).[28]

Table 1: Evolution of ECB rate forward guidance.

Period	Type	Formulation
Jul 2013 - Mar 2016	Qualitative	"The Governing Council expects the key ECB interest rates to remain at present or lower levels **for an extended period of time**"
Mar 2016 - Jun 2018	Time-based and chain-linked to net purchases	"[...] for an extended period of time, and **well past the horizon of our net asset purchases**"
June 2018 - Sep 2019	Dual (time and state-based)	"[...] **at least through the summer [end] of 2019** and in any case for **as long as necessary** to ensure that the evolution of inflation remains aligned with our current expectations of a sustained adjustment path"
Sep 2019 - Jun 2021	State-based; APP guidance chain-linked to key policy rates	"[...] until it has seen the inflation outlook **robustly converge** to a level **sufficiently close** to, but below, 2% within its projection horizon, and **such convergence has been consistently reflected in underlying inflation dynamics**"
Jul 2021 - Mar 2022	State-based; APP guidance chain-linked to key policy rates	"[...] until it sees inflation **reaching two per cent 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 two per cent over the medium term**. This may also imply a **transitory period in which inflation is moderately above target**."
Mar 2022 - Jun 2022	State-based; APP guidance chain-linked to key policy rates	"[...] 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.** ~~This may also imply a transitory period in which inflation is moderately above target.~~"

Sources: Monetary Policy Committee, Task Force on Rate Forward Guidance and Reinvestment (2022), op. cit., and authors' update based on various monetary policy decisions.
Notes: The reference to "lower" (levels of rates) was removed in June 2017, before being reintroduced in September 2019 and removed again in March 2022. In March 2019, the time horizon of rate forward guidance was extended from "through the summer" to "through the end" of 2019. Note: Emphasis and strikethrough added by authors.

To operationalise the new monetary policy strategy in a low inflation context and in the proximity of the lower bound on interest rates, the Governing Council decided to revise the ECB's interest rate forward guidance on 22 July 2021. Rate forward guidance was linked both to actual, realised progress in underlying inflation and to projected inflation reaching two per cent well ahead of the end of its projection horizon and durably for the rest of the projection horizon. This joint emphasis on realised and projected inflation

deployed by the ECB during that period, see Chapter 6 of M. Rostagno, C. Altavilla, G. Carboni, W. Lemke, R. Motto, A. Saint Guilhem and J. Yiangou (2021), 'Monetary policy in times of crisis: a tale of two decades of the European Central Bank', Oxford University Press.

[28] See Monetary Policy Committee, Taskforce on Rate Forward Guidance and Reinvestment (2022), 'Rate forward guidance in an environment of large central bank balance sheets: a Eurosystem stock-taking assessment', ECB Occasional Paper No. 290, March.

was motivated by the importance of robust decision making in an environment characterised by heightened uncertainty about future inflation developments.[29] In this vein, the type of forward guidance was of a state-based nature, allowing for changes in conditions to guide expectations about the ECB's rate policy, rather than a time-based nature, which would have locked in rate policy irrespective of the course of future events.[30]

A major advantage of state-contingent formulations of forward guidance is that these provide a powerful automatic stabilisation mechanism: on the one hand, should the inflation outlook improve more than anticipated (as ultimately happened), the expected time horizon to the first increase in interest rates automatically shortens; on the other hand, should there be setbacks to the inflation outlook, the time to lift-off would automatically lengthen.[31] With its forward guidance, the Governing Council underlined its commitment to maintaining a persistently accommodative monetary policy stance to meet its inflation target, at a time when the re-anchoring of inflation expectations at the new target level could not be taken for granted. This guidance remained in place until March 2022, when —amid rising inflation— it was amended to remove the previous easing bias, whereby the key policy rates would remain at their present or lower levels.[32] As realised and projected inflation had moved above 2%, in June 2022, the Governing Council assessed that the forward guidance conditions had been met, thus paving the way for a lift-off of the ECB's key policy rates and a return to a data-dependent, meeting-by-meeting approach.

One challenge that all central banks faced over the last year is that in the face of very large shocks the capacity of forward guidance to effectively guide market expectations is much diminished compared to periods when inflation volatility is low and rates are close to the lower bound.[33] In the face of very large shocks there is a commensurate increase in the volatility and disagreement about future macroeconomic and inflation developments. Chart 9 shows how this increase in volatility and disagreement materialised in the case of the euro area around the time of the Russian invasion of Ukraine. This increase in macroeconomic volatility at around the same time translated into an increase in the volatility of interest rate expectations at twelve to eighteen-month horizons (see Chart 10). In such an environment, the assessment of when exactly the forward guidance conditions are met is challenging. In the case of the euro area, while Eurosystem staff projections indicated that all three conditions were met only at the

[29] See P. Lane (2021), 'La stratégie de politique monétaire de la Banque Centrale Européenne', Revue d'Economie Financière, 144(4), pp. 75-89.

[30] Time-based forward guidance is also often referred to as "Odyssean", as the central bank commits to a certain course of action over a specified period of time irrespective of the incoming flow of data, akin to "tying oneself to the mast".

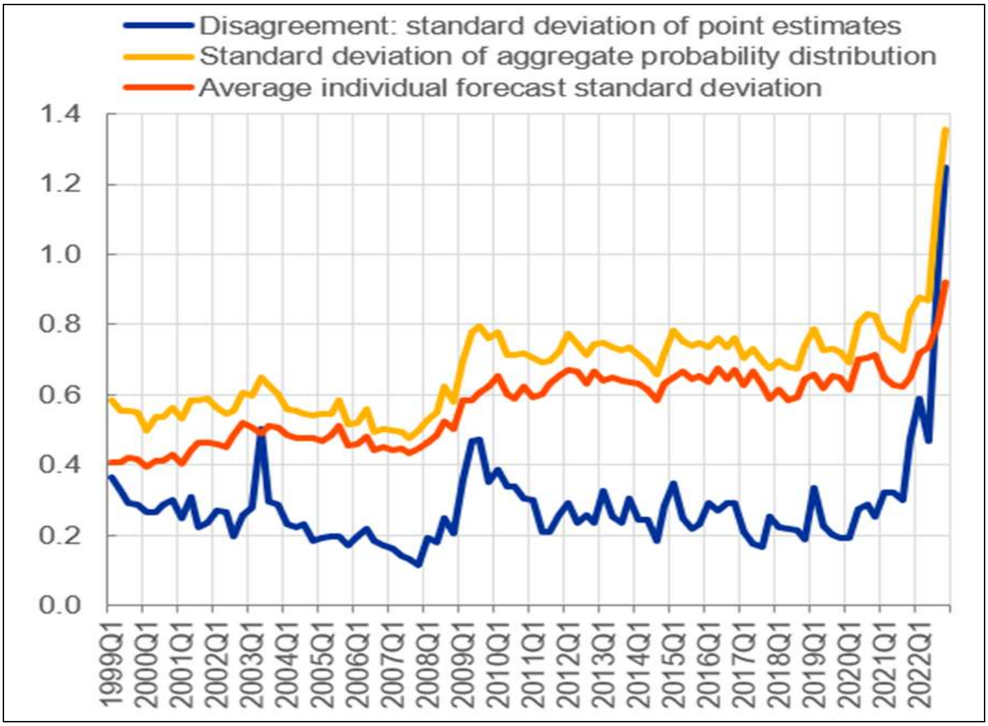
[31] See P. Lane (2021), 'The new monetary policy strategy: implications for rate forward guidance', ECB blog post, 19 August.

[32] In addition, the last sentence was deleted, which had become redundant in view of inflation having moved above target.

[33] See I. Schnabel (2022), 'Monetary policy and the great volatility', speech at the Jackson Hole Economic Policy Symposium organised by the Federal Reserve Bank of Kansas City, 27 August.

time of the June 2022 projection exercise, it had been made explicit in earlier projection exercises that those projections were surrounded by upside risks to the inflation outlook.[34] Also, more emphasis than usual was placed on alternative scenarios and the underlying narrative of such scenarios as compared to the baseline projections. The accounts of the April 2022 Governing Council meeting reveal that some members viewed the forward guidance criteria as already fulfilled at that time, although, overall, the Governing Council judged that an assessment should wait for the next update of the staff projections in June.[35]

Chart 9: Volatility and disagreement in survey-based euro area inflation forecasts (standard deviation).

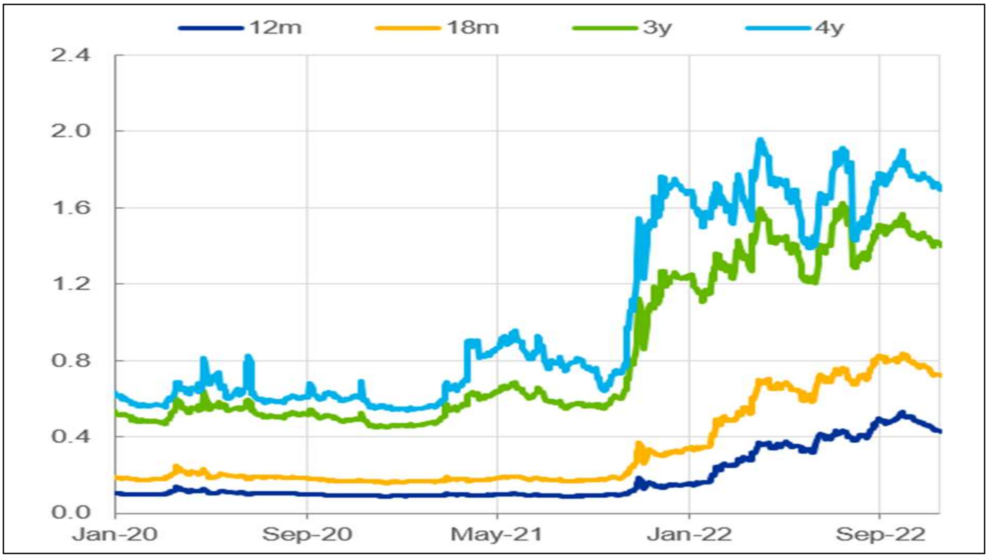


Sources: SPF and ECB calculations.
Notes: The inflation uncertainty is defined as the standard deviation of the aggregate probability distribution of the SPF forecast 2-year ahead. Latest observation: Q4 2022.

[34] The role of point forecasts vs risks surrounding such forecasts is an interesting avenue for research on the optimal design of forward guidance. In its recent review of its experience with forward guidance, the Reserve Bank of Australia concluded that "in retrospect, greater emphasis on upside risks might have led to an earlier decision to modify the time-based aspect of forward guidance" (see Reserve Bank of Australia (2022), 'Review of the RBA's Approach to Forward Guidance', 15 November).

[35] See 'Account of the monetary policy meeting of the Governing Council of the European Central Bank' of 13-14 April 2022.

Chart 10: Standard deviation of option-implied distribution of the 3-month EURIBOR (percentage points).



Sources: Refinitiv, Bloomberg and ECB calculations.
Notes: The chart depicts the standard deviation of risk-neutral densities extracted from prices of cap options on the 3-month Euribor at the 12-month, 18-month, 3-year, 4-year forward horizon. Latest observation: 15 November 2022.

There can thus be a legitimate discussion on the best timing of rate lift-off, although two considerations suggest that the exact timing of lift-off may not be of paramount importance. First, market expectations of the future path of policy rates had started to move upwards already well in advance of the actual rate lift-off and in that way had anticipated rate normalisation, bringing forward the tightening of financial conditions, as reflected e.g. in an early increase in risk-free sovereign rates. This change in market expectations, in turn, means that monetary policy is exerting a dampening effect on medium-term inflation well before those expectations will have been validated over time by actual monetary policy decisions.[36] Second, what is more important than the date when the rate normalisation journey starts is the entire interest rate path and its ultimate destination, i.e. the peak of the rate cycle, sometimes also referred to as the "terminal rate". This is why the Governing Council has emphasised all along the rate normalisation process that it is determined to bring rates to levels that will ensure the

[36] ECB staff estimates, based on a suite of macroeconomic models regularly used for policy analysis at the ECB, indicate that the change in the short-to-medium term structure of interest rates and balance sheet expectations observed between the start of monetary policy normalisation in December 2021 and September 2022, is expected to compress inflation by more than one percentage point in 2024. See P. Lane (2022), 'The transmission of monetary policy', speech at the SUERF, CGEG/Columbia/SIPA, EIB and Société Générale conference on "EU and US perspectives: new directions for economic policy" in New York, 11 October.

timely return of inflation to the target.[37] In an environment of elevated uncertainty, it is not possible to pin down such level of rates once and for all. Hence, the Governing Council has also emphasised that monetary policy is following a data-dependent, meeting-by-meeting approach where interest rate decisions will be guided by the evolution of the medium-term inflation outlook. This does not mean that the Governing Council does not provide information about the direction of travel but it rather means that such information is conditional on the inflation outlook materialising as expected. For example, at its December 2022 meeting the Governing Council communicated that —based on the revised inflation outlook— interest rates would need to rise further to reach sufficiently restrictive levels. And at the press conference following the meeting ECB President Lagarde explained that on the basis of the data available at that point in time the Governing Council expected to raise interest rates at a 50-basis-point pace for an extended period of time. In particular, the Eurosystem staff projections —that are based on market expectations of future interest rates— did not envisage a sufficiently timely return of inflation to target, necessitating policy action going beyond expectations prevailing at the time of the projection cut-off date. Data dependence means that at each upcoming meeting the Governing Council will check whether incoming data between two meetings confirm or materially change the medium-term inflation outlook and will, on that basis, reassess the appropriate course of monetary policy.

2.5. CONCLUSION

Monetary policy decisions taken by the ECB's Governing Council since July 2021 have been firmly grounded in the new strategy, which has provided a reliable playbook also in the current, high-inflation context. In the light of rising inflationary pressures, in December 2021 the Governing Council decided to embark on a path of monetary policy normalisation. Since then, the Governing Council has repeatedly emphasised that it will ensure inflation returns to the 2% target over the medium term, in line with its commitment to symmetry.

It is always worth noting that, at any point in time, it is likely that several monetary policy options are each consistent with the overall strategy. While a strategic framework provides a fundamental anchor for the medium-orientation of monetary policy, meeting-by-meeting decisions still require considerable judgement in terms of assessing the latest conjunctural information and determining the appropriate speed in adjusting the monetary policy stance.

During the 2020-21 strategy review, the ECB acknowledged that in a rapidly changing world, the monetary policy strategy will need to be reviewed more regularly. The next assessment is expected in 2025.

[37] See P. Hernández de Cos (2022), 'Monetary Policy in the euro area; where do we stand and where we are going?', speech at the XXI Congreso de Directivos CEDE in Bilbao, 29 September, for a discussion of the concept of "target-compatible terminal rate".

3. THE ECB AS PART OF AN IMPERFECT ARCHITECTURE

Maria Demertzis* **and Conor McCaffrey****

ABSTRACT

The unique and incomplete structure of the euro area brings with it significant risks and challenges for sound monetary policy. In this paper, we consider how quantitative easing has created a tighter link between sovereigns and the European Central Bank, consider how divergent yields between countries can challenge the monetary policy transmission mechanism, and discuss the strengths and weaknesses of two responses to these challenges: the European Stability Mechanism and the Transmission Policy Instrument. Without good architectural structures, political will is pivotal for sustaining economic and monetary union.

3.1. INTRODUCTION

The adoption of a single currency in the absence of political union is by construction imperfect. But so long as countries are vaguely similar and, importantly, subject to comparable shocks, all that matters is that the objective of price stability is credibly sustained. The rest will be managed by fiscal and economic policy at the country level. This was the hope when the European Central Bank was created.

But in the last 15 years, the euro area and the EU have been subjected to numerous crises. Some common with symmetric implications, like the pandemic; some common

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with asymmetric implications, like the financial crisis; and some simply different, like the energy crisis in that the energy mix was very different among countries. When EU countries agreed on the commonality of the crisis, reform and coordinated action followed in a timely and convincing manner. When, however, that was not the case, responses were slow and uncoordinated.

In the meantime, the ECB had to react, irrespective of whatever level of other coordination had been achieved (Demertzis et al 2022). As the interest rate reached the lower bound, the ECB created a calibrated tool to buy government assets in the form of quantitative easing. The creation of Outright Monetary Transactions (OMT), and even the "whatever it takes" speech were "tools" that had to exist even if they have not been used. They operated on the promise of the ECB, a very big player, acting. Recently, as monetary policy has had to reverse direction to fight inflationary pressures arising from the energy crisis, a threat of financial fragmentation arose. The inability of any of the existing institutions or instruments to deal with this threat left a vacuum that the ECB sought to fill by creating a specific tool, the Transmission Policy Instrument (TPI). But none of these tools is either perfectly designed or necessarily easy to implement.

The lack of a credible fiscal response during the financial crisis left the ECB having to overcompensate for the lack of fiscal stimulus. The European Stability Mechanism (ESM), the economic and monetary union's (EMU) answer to the lack of a lender of last resort, comes with a very rigid and at times punitive structure that makes it unattractive to use. And the existence of 19 different sovereigns creates a very diversified asset class that does not provide enough of a "safe asset" to back the financial system.

In what follows, we discuss four aspects that demonstrate the imperfect environment in which euro area monetary policy must be formulated. First, the use of quantitative easing has created a tighter link between central banks and their respective sovereigns that creates vulnerabilities. In the euro area this is compounded by the fact that multiple sovereigns exist. Second, the diversity of quality of sovereign debt differentiates the monetary policy transmission mechanism. Third, while the ESM was an important addition to the EMU architecture, its mandate and governance structure make it difficult to use. Last, the TPI is meant to deal with the unintended effects of increasing policy rates. It remains, however, difficult to implement given the variation in country debt quality.

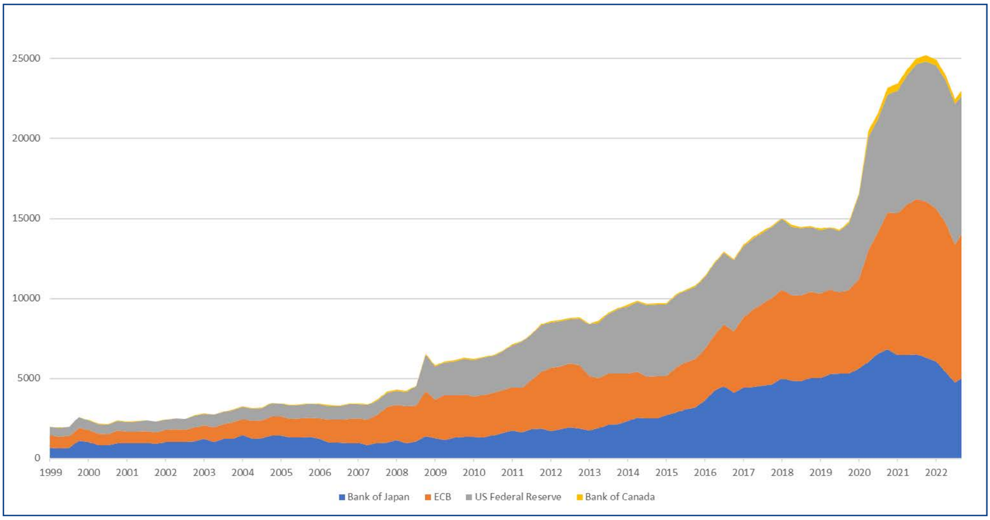
3.2. THE CHANGING FACE OF CENTRAL BANKS AND WHAT IT MEANS FOR THE ECB

The principal-agent relationship between a central bank and the fiscal authority implies that the central bank (the agent) is subservient to the wishes of the sovereign (the principal). This creates bad incentives, whereby the central bank is asked to finance government spending by printing money. The real effects of government expenditures are nullified, and inflation ends up higher than it otherwise would be. The institutional way of dealing with this problem, known as the inflation bias, is to make central banks independent from their principle with a very clear mandate of maintaining price stability. Independent central banking has been the frontier institutional setup of monetary authorities worldwide. This has meant that central banks are not allowed to buy government bonds directly from their governments (in other words, in the primary market), as this would be deemed monetary financing.

Central banks have however been allowed to buy government bonds in the secondary market (in other words, buy debt that exists already in the markets), as this is not an attempt to finance the government directly. Up until the start of the global financial crisis this was a non-issue, as the balance sheet itself, as well as the number of government bonds on central banks' balance sheets, was small (Figure 1). However, as interest rates reduced in the subsequent years, ultimately reaching the zero lower bound, central banks ran out of conventional tools to stimulate the economy. The application of unconventional tools became the new normal, whereby central banks would buy government bonds in the secondary market. This was a monetary policy action aimed at providing liquidity to those that held bonds, in the hope that this liquidity would feed into the real economy.

However, as the scale of quantitative easing increased, shown in Figure 1, the borders between monetary policy and monetary financing became blurred. Central banks did buy bonds in the secondary market, but their massive interventions lowered government yields, therefore enabling fiscal policy. It became difficult to disentangle monetary from fiscal policy.

Figure 1: Selected Central Bank Assets, USD Billions.



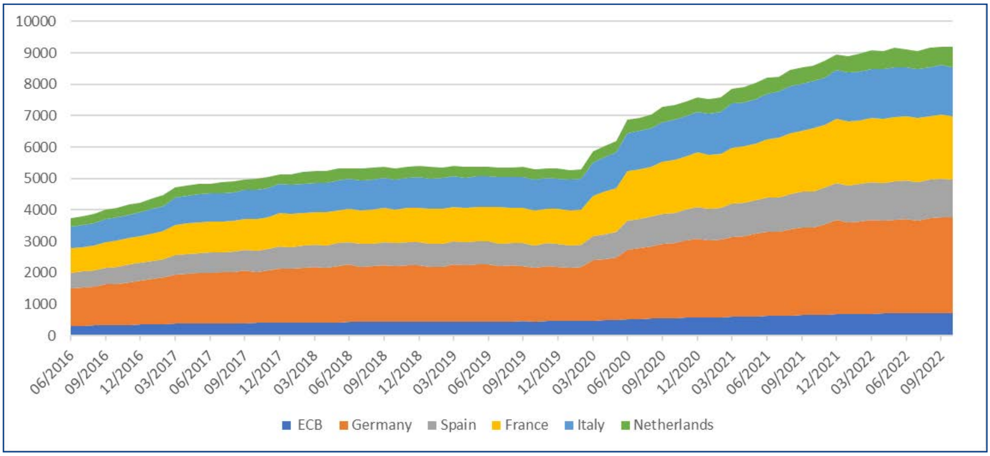
Source: Bruegel via Bloomberg, data retrieved November 22, 2022

This development creates two possibly uncomfortable links. The first is the obvious one- the central bank's balance sheet is now dependent on the quality of the sovereign debt it holds. A weak sovereign jeopardises the quality of its balance sheet.

It is a pending question of how this might affect a central bank's credibility and, therefore, its ability to achieve price stability (Claeys and Leandro (2016) and Fabo et al (2002) have a good discussion on this issue). What it does do, however, is increase the "systemic-ness" of any economy by extending the sovereign-bank doom loop to central banks.

The second link relates to the central bank's ability to reduce the size of its balance sheet. The speed and force with which the bank sells those assets, known as quantitative tightening, affects not only bond yields but also the quality of what remains on the balance sheet. A quick reduction of the balance sheet that suppresses yields will jeopardise financial stability and disincentivise the central bank from further reductions. This complicates the way central banks will exit their current positions.

Figure 2: ECB and selected national central bank contributions to the Eurosystem consolidated financial statement, EUR Billions



Source: Bruegel via the ECB.

This picture is true for all major central banks after the financial crisis. However, this issue and the links it creates are more relevant for the euro area than for other jurisdictions. Figure 2 plots the composition of the ECB's balance sheet since mid-2016 based on the geographical allocation. The ECB's dependence on sovereigns is a lot more complicated, given that there are many, not just one, and is vulnerable to contagion effects similar to what we saw during the financial crisis. As we enter the contractionary part of the monetary policy cycle, we also observe that the role of quantitative easing is not just for monetary policy purposes, but also for financial stability. Previously, when interest rates were low, these roles were moving in tandem. However, as interest rates increase, the two roles move in opposite directions. As of the end of 2021, the ECB held government bolds equivalent to almost 70% of euro area GDP. The speed of reduction will be of relevance to its effectiveness, but also compounded by the difficulty that it will affect spreads differently. We turn to this next.

3.3. FINANCIAL FRAGMENTATION: A UNIQUELY EMU PROBLEM

Major institutional developments, such as establishing the ESM in 2012, contributed to bringing the euro-area sovereign debt crisis of the 2010s to an end. However, the failure to continue to deepen the EMU as the crisis abated meant that the architecture needed to respond to shocks and crises remains incomplete (Claeys, 2020). This point was reinforced from September 2021 to June 2022, as rising spreads- the difference in the yield on bonds issued by countries- between European countries sparked concern regarding financial fragmentation.

Within the EMU, a degree of yield divergence, or fragmentation, is both to be expected and justified, given the variance in economic fundamentals (e.g., debt-to-GDP ratios) across member countries. The problem arises, however, when the spreads grow beyond what can be explained by these fundamentals and begin to spiral dangerously.

Financial fragmentation is a problem that derives from the unique institutional architecture of the EMU. 19 countries with distinct economic fundamentals and policies sharing a single currency and operating under a common monetary policy is unusual. The ECB acts as one agent to 19 principles, a peculiar arrangement unique to the euro area. This *sui generis* architecture brings with it unique challenges and threats. No other central bank is faced with multiple agents that can experience divergent economic outcomes or interest rates on their borrowing. Various EMU institutional factors come together to create the conditions that make this fragmentation possible.

Firstly, and most importantly, the euro area lacks a clear, unquestionable buyer of last resort. From the outset, the euro area was designed to guard against the possibility that undisciplined behaviour of one country could adversely impact the macroeconomic conditions for others. As a condition of giving up their own currencies and monetary sovereignty, countries had to be convinced that their economic fortunes would not be tied to the potentially dangerous and self-interested behaviour of others. To provide this assurance, and reduce the incentive for moral hazard, the Maastricht Treaty was designed to prohibit monetary financing by the ECB. This, however, limited the tools available to the ECB in times of crisis (Claeys et al, 2022).

By contrast, the US Federal Reserve and the Bank of England provide a backstop to their respective sovereign bond, which has been important on various occasions in the past (Hauser, 2021). Euro-area member states lack this explicit guarantor, which is problematic given the possibility for multiple equilibria in the sovereign debt markets.

In times of high public debt, different equilibrium yields are possible for sovereign bonds. By coordinating expectations, market participants can bring about either a good or bad outcome: the former when the expectation of default, and therefore sovereign yields, are lower; the latter when the risk of default is deemed to be higher, and therefore sovereign yields are higher. Should expectations converge on the latter they can be self-fulfilling, as the increase in debt servicing costs can ultimately lead the sovereign to default (Camous and Cooper, 2019). Central banks can reduce the risk of arriving at the second outcome, but past spikes in euro area yields (e.g., 2010-12) have arguably been somewhat caused by the ECB's hesitancy in performing this role (Claeys et al, 2022). As we will explain below, the ESM was an attempt to provide for this missing link. Necessary and welcome though this is, it is not without problems.

A second contributing factor to potential euro area financial fragmentation is the ECB's collateral framework. The framework used by central banks to determine whether to accept an asset as collateral, and, if so, how to value it, shapes which assets market participants deem to be safe. This in turn affects the yields of those assets. Many central banks around the world use their own criteria to value haircuts. However, since the euro area is not one country but many, there are significant differences in the quality of country assets, which complicates what to accept as collateral and how to value it. This is a multifaceted and complex process, and there has historically been a low level of transparency regarding ECB decision-making on assets to be used as collateral in its refinancing operations (Claeys and Linta, 2019). The weight given by the central bank to the pro-cyclical ratings of private credit agencies has risked the safe-asset status of certain sovereign bonds on various occasions since 2006, by introducing significant swings and volatility (Orphanides, 2017; Claeys and Goncalves Raposo, 2018)[1]. This uncertainty has been reflected in the rates faced by euro area governments to borrow, contributing to yield divergence.

A final potential source of fragmentation is redenomination risk. Given the possibility of either a partial or full break-up of the euro area, and thus a return of countries to devalued legacy currencies, markets factor in the risk that the assets they hold may lose value (De Santis, 2018). This results in certain countries facing higher interest rates irrespective of default risk, as occurred in numerous countries between 2010-2012, but most notably in Greece between 2010-2015.

Taken together, the risk of fragmentation in the euro area is obvious. Given that yields represent the prices governments pay for borrowing, an increase in spreads is clearly problematic for the countries in question, as it becomes more costly for them to access finance on the markets. It can also induce financial instability due to the sovereign bonds held on the balance sheet of domestic banks.

Rising yields can also however have a wider systemic impact, by impairing the ability of the ECB to control prices. The rates paid by governments on their borrowing are deterministic domestically, as they play a benchmark role in the real economy. If European countries are faced with diverging interest rates disconnected from economic fundamentals, as in early 2022, the ECB's ability to use rate changes to control prices is curtailed, as it cannot effectively target demand across the bloc.

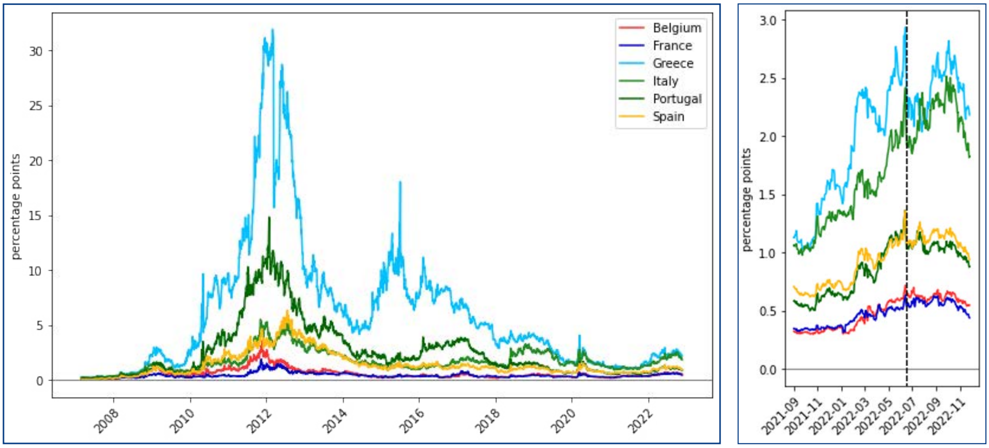
In more technical terms, this fragmentation of the monetary union means that homogeneous monetary transmission is impaired, as governments, and therefore consumers and businesses, across Europe are effectively faced with different borrowing costs, whatever the efforts of the ECB. Taken to its extreme, price stability and even the euro itself could be threatened. This means that unchecked spreads resulting in EMU frag-

[1] The ECB has moved away from reliance on private credit rating agencies since the onset of the pandemic. However, it has yet to propose a permanent solution to this issue.

mentation challenge the very core of the ECB's mandate: low inflation and financial stability.

As illustrated in Figure 3, the difference in the yield rate between various European countries and Germany grew between September 2021 and June 2022. Markets may have been worried about a combination of slower growth, a reduction (or a complete end to) asset purchases and higher interest rates. Context however is important. These spreads were not in the same league as those seen at the peak of the euro crisis in early 2010s, nor even those from before the Covid-19 pandemic. In addition, debt-to-GDP ratios are expected to fall in European countries coming years, meaning that solvency concerns for European governments should be low (Claeys and Guetta-Jeanrenaud, 2022). This episode alone did not constitute an existential threat to the Eurozone.

Figure 3: 10-year interest rate spreads vs Germany for euro-area countries with the highest debt-to-GDP ratios (in %).



Source: Bruegel based on Bloomberg, data retrieved November 25 2022. The black dashed line in the second panel marks the 15 June meeting of the ECB, where the Governing Council committed to the development of an anti-fragmentation tool.

However, this episode exposed yet another vulnerability that had gone unnoticed until that point- the risk of fragmentation as policy rates increase. The ECB announced on 9 June 2022 that it planned to increase interest rates in July and September, the first in years, to tame inflation[2]. The expectation of rate increases resulted in a significant increase in spreads between euro-area countries.

As discussed, there is a possible tension between the price and financial stability priorities of the ECB as monetary policy enters the contractionary part of the cycle. Given this potential divergence between the two objectives, the need for euro area institutions to adequately address these risks was, and continues to be, critically important.

[2] https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.mp220609~122666c272.en.html

What mechanism was there in place to deal with this risk? Was the OMT the right way to control divergent yields?

3.4. ESM: AN IMPORTANT MISSING LINK

The ESM was created in reaction to this lack of a crucial buyer-of-last-resort function during the financial crisis. Its stated purpose is "*to act as a lender of last resort*" and "*to enable the countries of the euro area to avoid and overcome financial crises*"[3]. Prima facie therefore, there already exists a tool available to deal with rising spreads.

The reality however has proven quite different for two reasons. The first reason is that, in all fairness, the ESM was created during a crisis to deal with that crisis. No euro area country is in danger of losing access to the markets at the current juncture, so requesting ESM involvement goes beyond its scope. The second reason is that its intergovernmental nature makes it a very "slow" moving tool and very unpopular given that it comes with very heavy strings attached, known as conditionality. We consider this issue a little closer now.

The ESM is known for the role its programmes play in providing the conditionality required for OMT by the ECB. This mechanism was designed to support distressed euro area sovereigns during the sovereign debt crisis, and, while never used, its creation reduced spreads in certain distressed countries. The sheer existence of such a tool provided the missing link in the financial architecture, namely of a lender of last resort. In that respect, it was a very successful addition to the EMU architecture.

However, for it to be applied it requires unanimity. All euro area finance ministers need to agree to using it, which means that it can only be used in rare and exceptional circumstances. The rise of spreads in the context of the monetary policy cycle does not equate with a crisis moment. Moreover, this tool was also designed to be used in a discrete fashion in conjunction with deep reforms and very close monitoring. This intrusive conditionality has made the institution unpopular. Indeed, the pandemic assistance programme made available by the European Stability Mechanism at the start of the pandemic had zero uptake even though there was close to no conditionality attached to it.[4]

This aversion to close monitoring is also seen in the uptake of the EU's Recovery and Resilience Fund (RRF). While the grant component has been claimed in full by all countries, the loan instrument of RRF remains very underused by countries that could benefit from a lower-than-market borrowing cost (Demertzis 2022). The RRF has nothing to do with the ESM of course. However, the intrusive monitoring of EU institutions (and not only) during the financial crisis has now led countries to accept external control only when receiving grants. When it comes to debt, EU countries still prefer to borrow from markets than borrowing from the European family (ibid).

[3] https://www.esm.europa.eu/about-us

[4] https://www.esm.europa.eu/financial-assistance/lending-toolkit#explainer-pandemic-support

The ESM has been described as "*the cornerstone of the current euro-area architecture*" (Claeys and Collin, 2018). Even if never used, the OMT is an important safeguard for the ECB against liquidity crises, with its presence alone instilling confidence in the markets.

However, it is not fit to provide the guardrails against euro area fragmentation- nor is it intended to. Its current tools are ill-equipped for this purpose, and its slow political process is inefficient. Even if these tools were reformed or better-fitted ones introduced, it seems likely that the prevailing aversion by countries towards the facility would persist, introducing unnecessary frictions into a system designed for rapid use.

3.5. TPI: GOING WHERE THE ESM CANNOT?

In the absence of a tool that could realistically be applied in the presence of financial fragmentation, the ECB introduced the TPI in July 2022. Its stated aim is to provide the ECB with the authority to "*make secondary market purchases of securities issued in jurisdictions experiencing a deterioration in financing conditions not warranted by country-specific fundamentals, to counter risks to the transmission mechanism to the extent necessary*"[5].

Conditional on the macroeconomic fundamentals of the country in question being deemed to be sound, the Governing Council of the ECB would activate the purchase of securities to bring yields down to the level necessary for effective monetary policy transmission. The ECB has defined that eligibility would be dependent on four main criteria: 1. "*compliance with the EU fiscal framework*"; 2. the "*absence of severe macroeconomic imbalances*"; 3. "*fiscal sustainability*", as determined by debt sustainability analyses carried out by various institutions, including the ESM, but also internal analysis by the ECB; and 4. compliance with country-specific, RRF and European Semester commitments and recommendations.

The first of these is not currently applicable given the suspension of the EU fiscal rules. However, we believe that the strict criteria imposed by the ECB on any potential usage makes the use, and consequently abuse, of the instrument unlikely. In this respect, TPI may ultimately play a similar role to the OMT, in the sense of achieving its goal by virtue of its existence, without actually being called into use.

This addition to the ECB's toolkit was well-received by financial markets. As shown in Figure 3, merely the announcement on June 15 2022, that the ECB was working "*to accelerate the completion of the design of a new anti-fragmentation instrument*"[6] caused spreads to initially fall and ultimately plateau, succeeding in its immediate goal of preventing any spiralling of spreads. Therefore, from a short-term perspective the instrument could be viewed as a success. The actual design of the tool is however imperfect, and it is not clear how it can be operationalised.

Certain elements of the tool are well-designed. As detailed by Claeys and Demertzis

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[5] https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.pr220721~973e6e7273.en.html

[6] https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.pr220615~2aa3900e0a.en.html

(2022), for the tool to be effective, it should be (i) country-specific, (ii) applied in conjunction with rate decisions and (iii) dependent on debt sustainability being validated by a political process. We feel that the first two criteria are satisfied in the TPI. If implemented, the measure would be targeted at particular countries, not applied indiscriminately. The ECB also seems to be cognisant of the importance of harmonising the tool with other monetary policy actions, noting that any activation should be conducted in a way that causes "*no persistent impact… on the monetary policy stance*"[7]. No limit is placed on purchases, which is also necessary to allow for any size shocks.

Issues remain regarding the third point highlighted above, namely the political process used to determine eligibility for support. Given the importance of distinguishing between warranted spreads (due to underlying fundamentals) and the unmoored spreads the TPI is designed to counter (such as those caused by speculation), the political approval process is critical. In its current guise, there is significant discretion for the ECB to decide both when to intervene and when to withdraw support. This tension between preferences for rules or discretion is common to many debates around the economic framework of the EU, including around the fiscal rules (Blanchard et al, 2022).

Firstly, the European Commission is given significant input into the various criteria used to determine eligibility. For instance, in assessing whether countries are complying with their RRF commitments or European Semester recommendations, the Commission will likely be under extreme pressure to answer to the affirmative if this is a criterion for a distressed sovereign receiving support. Questions have separately been raised as to the quality of the Commission's assessment of national recovery and resilience plans (Darvas, 2022). Relying on Commission assessments regarding compliance with commitments and recommendations could therefore be problematic.

This however is skirting around the major issue with the anti-fragmentation tool- how best to assess debt sustainability. The TPI is designed to support sovereigns experiencing excessive widening of spreads. Where should the line be drawn on what constitutes 'excessive'? If security purchases are too lenient, and the ECB intervenes even when spreads are driven by fundamentals, any market incentive for discipline is removed. For this reason, the third criteria for eligibility- fiscal sustainability- is paramount.

The Governing Council of the ECB "*will take into account, where available, the debt sustainability analyses by the European Commission, the ESM, the International Monetary Fund and other institutions, together with the ECB's internal analysis*"[8], with no details given as to how these various analyses will be considered. This fiscal sustainability criterion, as well as the other three requirements, will merely serve as "*an input into the Governing Council's decision-making*". This deliberate ambiguity, coupled with the role given to internal ECB debt sustainability analysis, gives the central bank enormous leeway to take what will essentially be high-stakes political decisions, opening it up to risks of politicisation. The ECB would certainly not be eager to find itself in the position where it has to apply the tool and therefore make a call as to whether a country's debt is sustainable or not.

7 https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.pr220721~973e6e7273.en.html

8 Ibid.

An alternative arrangement would be for an external technical analysis, such as by the Commission or the ESM, to determine the sustainability of a sovereign's debt. While asset purchases should occur in real time to respond to yield divergences, this required analysis could take place at regular intervals, such as on an annual basis through the Commission's fiscal monitoring. Any assessment could then be approved by an established political body, such as the European Council or Parliament, to ensure legitimacy (as discussed by Claeys and Demertzis (2022)). This arrangement would insulate the ECB from the risk of making political decisions, and in doing so enable it to effectively reduce unwarranted fragmentation through targeted asset purchasing.

The fact however remains that any declaration by an official institution that a country experiencing widening spreads is on an unsustainable debt trajectory would likely further raise yields, and ultimately become self-fulfilling. Just like the ECB, the Commission is therefore also unlikely to ever make such an assessment. The system could however be designed in a manner that allows the Commission to provide various forward-looking scenarios reflecting the underlying risks. The relevant political body could then determine which path reflects the baseline: if the debt is sustainable, the TPI could be activated; if not, the sovereign should apply for an ESM programme to address its underlying fundamentals.

As with the implementation, there are question marks over the process around the termination of the use of the TPI. The ECB states that "*purchases would be terminated either upon a durable improvement in transmission, or based on an assessment that persistent tensions are due to country fundamentals*"[9]. As explained earlier, it is difficult to imagine the Governing Council announcing that the divergent yields were due to fundamental weaknesses in a euro-area country, as it would only further increase spreads. TPI purchases cannot however continue in perpetuity in the absence of converging yields, meaning that eventually a difficult decision would have to be made and be politically approved. Such a choice should be taken out of the hands of the apolitical central bank, perhaps through the same sustainability assessment structure proposed above.

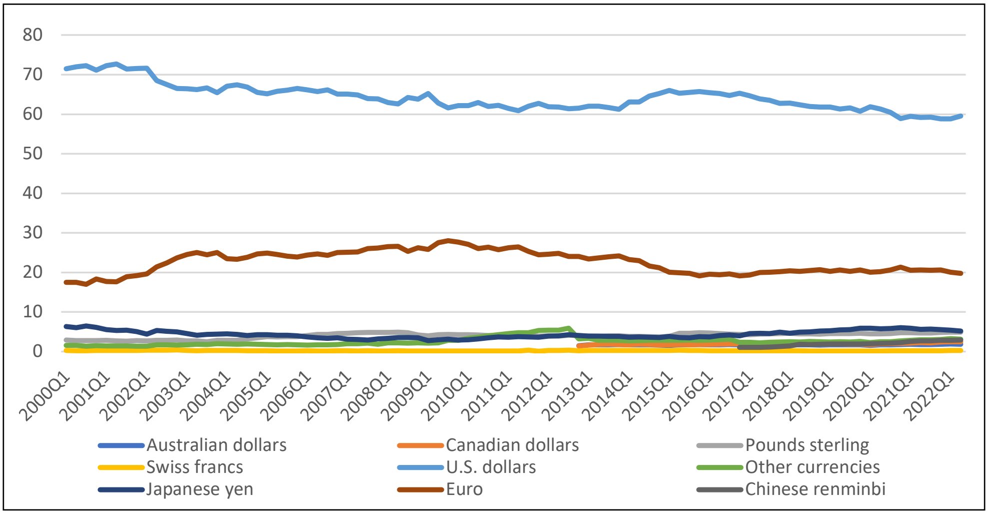
This captures adequately Europe's catch-22 problem: financial fragmentation can only be dealt with if there is no risk of debt sustainability. But debt sustainability is guaranteed only when the ESM intervenes. This requires conditionality which countries dislike. The ECB has come in with a new tool, to bypass this uneasiness that countries have with the ESM, hoping it will never have to use it- and it has put in place sufficiently high thresholds to essentially guarantee that it will not. Just like with OMT, TIP is effective as a promise. But just like with any promise, it can only be as credible as its ability to be deployed.

These imperfections reflect the structural challenges inherent to EMU. The wider impact of these weaknesses is demonstrated when looking at the global role of the euro. As shown in Figure 4, only approximately 20% of global allocated reserves are held in euro, as opposed to 60% in dollars, a share which has remained steady over time. Until now, the euro has not challenged the dominance of the dollar. Without meaningful

[9] Ibid.

reforms, such as a completed Banking Union, better fiscal rules, and a reformed ESM/OMT mechanism, and therefore a credible EMU, it is unlikely it ever will.

Figure 4: the share of allocated foreign exchange reserves by currency



Source: Bruegel based on IMF.

3.6. CONCLUSIONS

Reality in the last 15 years has shown that we are in a state of polycrisis. Financial, geopolitical and now energy tensions are not going to ease. The imperfections described above reflect the structural challenges inherent to EMU. The peculiar system of one principle for 19 agents prevents the ECB from acting as an unequivocal buyer of last resort for euro area sovereign debt, as the Bank of England did to drive down yields after the failed 'mini-budget' of September 2022. As such, this patchwork of policy fixes and instruments is necessary, but consequently the EMU remains an incomplete and potentially unstable edifice.

It also means that political backing to step in when imperfections manifest themselves remains of crucial importance. At the heart of these imperfections is the divergence of sovereign debt quality. Fiscal policy at the national level and coordinated at the EU level is crucial for allowing the ECB to function properly. Therefore, architectural improvements in the EU's fiscal framework are crucial and why thinking of good and fair ways of mutualising certain risks should be part and parcel of any changes moving forward.

REFERENCES

Blanchard,O., J. Zettlemeyer and A. Sapir (2022) 'The European Commission's fiscal rules proposal: a bold plan with flaws that can be fixed', *Bruegel blog*, 30 November, available at https://www.bruegel.org/blog-post/european-commissions-fiscal-rules-proposal-bold-plan-flaws-can-be-fixed

Camous, A. and R. Cooper (2019) '"Whatever It Takes" Is All You Need: Monetary Policy and Debt Fragility', *American Economic Journal: Macroeconomics*, 11(4): 38-81.

Claeys G. and A. Leandro (2016), "The European Central Bank's quantitative easing programme: limits and risks", Bruegel Policy Brief, No. 4, February.

Claeys, G. and A. Collin (2018) 'Does the Eurogroup's reform of the ESM toolkit represent real progress?', *Bruegel blog*, 13 December, available at https://www.bruegel.org/blog-post/does-eurogroups-reform-esm-toolkit-represent-real-progress

Claeys, G. and M. Demertzis (2022), 'A new European tool to deal with unjustified rising spreads', *Bruegel blog*, 20 June, available at https://www.bruegel.org/blog-post/new-european-tool-deal-unjustified-rising-spreads

Claeys, G., M. Demertzis and L. Guetta-Jeanrenaud (2022*) 'Fragmentation risk in the euro area: no easy way out for the European Central Bank',* In-depth Analysis requested by the ECON Committee, European Parliament, available at https://www.europarl.europa.eu/cmsdata/249536/Bruegel_DEF.pdf

Claeys, G. and I. Goncalves Raposo (2018) 'Is the ECB collateral framework compromising the safe asset status of euro-area sovereign bonds?', *Bruegel blog*, 8 June, available from https://bruegel.org/2018/06/isthe-ecb-collateral-framework-compromising-the-safe-asset-status-of-euro-area-sovereign-bonds

Claeys, G. and L. Guetta-Jeanrenaud (2022) 'How rate increases could impact debt ratios in the euro area's most-indebted countries', *Bruegel blog*, 05 July, available from https://www.bruegel.org/blog-post/how-rate-increases-could-impact-debt-ratios-euro-areas-most-indebted-countries

Claeys, G. and T. Linta (2019) 'The evolution of the ECB governing council's decision-making', *Bruegel blog*, 27 June, available from https://www.bruegel.org/blog-post/evolution-ecb-governing-councils-decision-making

Darvas, Z. (2022) 'The puzzle of European Union recovery plan assessments', *Bruegel blog*, 08 February, available from https://www.bruegel.org/blog-post/puzzle-european-union-recovery-plan-assessments

De Santis, R. A. (2018) 'Redenomination Risk', *Journal of Money, Credit and Banking*, 51(8): 2173-2206.

Demertzis, M. (2022). 'NextGenerationEU: an underused facility?', Comment, Bruegel, 15 November. https://www.bruegel.org/comment/nextgenerationeu-underused-facility

Demertzis, M., M. Domínguez Jiménez and N. Viegi (2022), Reviving the case for policy coordination in EMU, in *The Cambridge Handbook on European Monetary, Economic and Financial Market Integration* by (Editors) Dariusz Adamski, Fabian Amtenbrink, Jakob de Haan, Cambridge University Press.

Fabo, B, M. Jancokova, E. Kempf and L. Pastor, (2021), "Fifty shares of QE: comparing findings of central bankers and academics", ECB Working Paper series, No. 2584, August. https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2584~004629c8e7.en.pdf

Hauser, A. (2021) 'From Lender of Last Resort to Market Maker of Last Resort via the dash for cash: why central banks need new tools for dealing with market dysfunction', *Bank of England speech*, 7 January, available from
https://www.bankofengland.co.uk/-/media/boe/files/speech/2021/january/why-central-banksneed-new-tools-for-dealing-with-market-dysfunction-speech-by-andrew-hauser.pdf

Orphanides, A. (2017), 'ECB monetary policy and euro area governance: Collateral eligibility criteria for sovereign debt', *MIT Sloan Research Paper* No. 5258-17, available from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3076184

4. THE BANKING OUTLOOK IN EUROPE: BETTER MARGINS VERSUS POTENTIALLY HIGHER DELINQUENCY RATES

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ABSTRACT

After many years of very low or even negative rates, the significant and widespread rise in interest rates, could help "normalise" banking activity, allowing entities to generate results based on their ability to transform maturities and dilute risks. However, when interest rates rise, credit institutions also have to bear increasing financing costs. Therefore, a direct and immediate pass-through of higher rates to better bank results cannot be taken for granted. This article explicitly considers three additional factors that will influence banks profitability in the current environment: the structure of their balance sheet, the different sensitivity of assets and liabilities to interest rates, and the speed of response to changes, which is far from homogeneous, between assets and liabilities of a very different nature. The article is organised as follows: the first section reviews the macroeconomic environment and recent monetary and fiscal policy decisions; section 3 describes the situation of European banks in terms of volume of activity, solvency and profitability; section 4 is devoted to non-performing loans; section 5 includes comments on Spanish banks; and finally some conclusions and possible future developments.

4.1. INTRODUCTION

On 6 October 2022, Kristalina Georgieva, Managing Director of the International Monetary Fund (IMF) flagged "*that the risks of recession are rising*" and announced that the IMF estimates "*that countries accounting for about one-third of the world economy will experience at least two consecutive quarters of contraction this or next year*". "*Our world economy is* *like a ship in choppy waters. We need all the wisdom we can muster to steady the ship and navigate through what is ahead*".[1]

The Governor of the Bank of Spain, in his speech only two days earlier[2], stressed the same idea: "*In short, we are in the midst of a highly complex macro-financial situation, characterised by high inflation, a tightening of financing conditions and greater uncertainty, which has already triggered a slowdown in economic activity in Q3 and a widespread downward revision in the growth outlook for the coming quarters*".

In her speech, Ms. Georgieva added a reflection that is of interest to the banking business: "*And, even when growth is positive, it will feel like a recession because of shrinking real incomes and rising prices*". This is particularly relevant for banks which, like the Spanish banks, develop a retail commercial banking model in which, together with macroeconomic variables, the expectations of economic agents take on decisive importance. These, together with the greater uncertainty mentioned by the Governor, will determine the savings, investment and consumption decisions of companies and households.

The good news, also highlighted by the IMF in its Global Financial Stability Report, is that the starting point of the banking sector at least in advanced countries is solid, with strong financial ratios and low risk of systemic events: "*A bright light comes from our global bank stress tests which show relative resilience for advanced economy banks… In aggregate, the global banking system has sufficient capital to absorb losses under the stress scenario, benefiting from the reforms since the global financial crisis and the buildup of capital over the past years*".[3]

Moreover, the overall rise in interest rates, after many years of very low or even negative rates, could help "normalise" banking activity, allowing entities to generate results based on their ability to transform maturities and dilute risks.

However, it should not be forgotten that, when interest rates rise, credit institutions will also have to bear the increase in their financing costs. Therefore, a direct and immediate pass-through of higher rates to better bank results cannot be taken for granted.

At least three additional factors should be taken into consideration.

- First, the structure of their balance sheet which, as we know, incorporates instruments that are either insensitive to interest rate changes or whose market value moves inversely to that of interest rates.
- Second, the different sensitivity of assets and liabilities to changes in interest rates depending on the instruments and counterparties.
- And finally, the speed of response to changes, which is far from homogeneous, between assets and liabilities of a very different nature. And all this bearing in mind that credit institutions compete in increasingly developed markets, in which savers and investors find alternatives to their needs and interests.

[1] https://www.imf.org/es/News/Articles/2022/10/06/sp-2022-annual-meetings-curtain-raiser

[2] https://www.bis.org/review/r221021c.pdf

[3] https://www.imf.org/en/Publications/GFSR/Issues/2022/10/11/global-financial-stability-report-october-2022

The main purpose of raising intervention interest rates by central banks is to address the high inflation problem: reducing inflationary pressures by increasing economic slack (lowering aggregate demand relative to the supply capacity of the economy)[4].

High inflation, rising interest rates and the reduction in aggregate demand have consequences on the capacity of companies and households to meet their financial obligations, and therefore could anticipate an increase in non-performing loans in the coming quarters, consistent with the generalised downward revision of growth forecasts.

In this scenario, for the first time in many years, banks are no longer on the list of suspects responsible for the crisis. On the contrary, the focus now seems to be on credit institutions as the first line of defence in charge of cushioning the impact of those "choppy waters" on European economies.

It is not only the combination of all these elements —a very complex macro-financial environment, high and persistent global inflation, the tightening of financing conditions derived from the overall process of normalisation of monetary policy and high uncertainty— that will determine the results of European banks. There will be other reasons (fiscal and tax policies, regulatory and supervisory developments, etc.), that are difficult to foresee.

In addition, we must look back to see how banks have recovered from the global financial crisis of 2008 and check how well equipped they are to face the challenges ahead.

In addressing the question raised in the title of this chapter: **Better margins versus potentially higher delinquency rates**, we decided to approach the problem by disaggregating margins and, ultimately, ROE. This will allow to have a vision of the variables that might affect the performance of banking activity in coming quarters, shedding light on the direction they might take. After the recent period of sharp increases in interest rates, it seems to be the right time to review and rethink, the determinants of European banks' return on assets and on equity.

The article is organised as follows: the following section briefly reviews the macroeconomic environment and recent monetary and fiscal policy decisions insofar as they may affect banking results; section 3 refers to the situation of European banks in terms of the evolution of the main indicators of activity, solvency and profitability; section 4 is devoted to non-performing loans; section 5 includes comments on Spanish banks; and the article closes with two sections containing brief reflections on foreseeable developments in the immediate future and, finally, some succinct conclusions.

4.2. THE MACROECONOMIC ENVIRONMENT

4.2.1 THE EUROPEAN ECONOMY

The coronavirus pandemic (COVID-19) and the extensive set of measures taken to

[4] Speech by Philip R. Lane, Member of the Executive Board of the ECB. New York, 11 October 2022. https://www.ecb.europa.eu/press/key/date/2022/html/ecb.sp221011~5062b44330.en.html

contain its spread had a strongly contractionary effect on the global economy, with severe restrictions on mobility and a widespread drop in the supply of goods and services.

In the euro area, the pandemic emergency led to a decline in GDP, which fell by 6.4 % in 2020, the largest contraction on record since the inception of the euro, and an increase in the unemployment rate almost across the board in all member states.

In 2021, the measures taken to contain contagion proved effective, with a return to a path of recovery and a robust rebound in the economy. Real GDP in the euro area grew by 5.3% annually, job creation was strong and the unemployment rate fell to a record low since the 2008 crisis of 7 % in December.

The pandemic did, however, introduce some global supply constraints and bottlenecks. The relaxation of mobility restrictions, the rebound in the economy, the pick-up in demand in 2021 and, in particular, a sharp rise in energy prices led to an increase in inflation from 0.3% in 2020 to 2.6% on average in 2021 and to a rate of 5% in December.

During the first half of 2022, the uncertainty of rising inflation has only increased with the invasion of Ukraine, reduced gas supplies from Russia and higher energy prices. Large sectors have been affected and the year-on-year inflation rate in the euro area stood at 8.6% in June (in October it was already 10.7% for the headline index and 40% for the energy index).

Forecasts are not optimistic, with the possibility of recession looming in 2023 at least in some countries, despite the fact that some indicators are more positive than expected: the unemployment rate in the euro area has continued to fall this year and in August it reached a new low of 6.6%. In the second quarter of the year, GDP growth, although weak, was positive at 0.7% (0.2% in the third quarter) and household real consumption per capita in the EU increased by 0.6%.

Undoubtedly inflation is a serious problem, but the ECB in determined to take actions to control it. Uncertainty, fueled by the unpredictable evolution of the war in Ukraine, is however the main defining feature of the situation of the European economy at the end of 2022.

4.2.2. MONETARY POLICY. ECB MEASURES

In order to face the crisis caused by the pandemic, the European Central Bank adopted a whole series of measures as early as spring 2020, which, in a schematic way and without being exhaustive, were as follows:

- the maintenance of the interest rate on the main refinancing operations and the marginal lending and deposit facilities at 0.00 %, 0.25 % and -0.50 %, respectively;
- the continuation of the asset purchase programme (APP), increasing its amount, and the relaxation of the corporate sector purchase programme (CSPP) by broadening the eligible collateral;
- the launch of a new temporary Pandemic Emergency Purchase Programme (PEPP), with an initial envelope of 750 billion euros;

- a new series of non-targeted pandemic emergency longer-term refinancing operations (PELTROs), through full allotment tenders, at a fixed rate 25 basis points below the average rate applicable to the main refinancing operations;
- and, probably the most relevant for credit institutions at that time, the modification of the conditions of the so-called TLTROs (targeted longer-term refinancing operations).

The amendments to the TLTRO III were intended to encourage the granting of credit by the entities receiving the funds and, at the same time, to avoid the potential stigma effect of accessing emergency financing granted by the central bank.

To this end, if certain lending targets were met, the interest rate would be set at 50 basis points below the deposit facility, which at the time was -0.50%, i.e. banks could obtain funds at a lower cost than the return they received on their excess reserves; the total limit that each participating bank could apply for was increased; and measures were adopted to relax the criteria for the eligibility of collateral. The features of these facilities made them attractive to banks, and indeed the vast majority made use of them[5].

In July 2021 the Governing Council of the ECB approved its new monetary policy strategy, which envisages a symmetric inflation target of 2% over the medium term, as this is considered a better way of maintaining price stability than the "below but close to 2%" inflation target in place until then. The new target is symmetric in the sense that positive or negative deviations from the target are equally undesirable, implying that it is considered acceptable for inflation to be slightly above the target for a transitional period.

And in 2022, with the war in Ukraine underway, it was decided to end net asset purchases, while maintaining the reinvestment of the principal of maturing securities; reinvestments can be flexibly adjusted over time, across asset classes and across jurisdictions.

A new Transmission Protection Instrument (TPI), designed to address the risks of financial fragmentation in the euro area, was adopted in July 2022[6]. It is additional to the existing toolkit and can be activated to counter disorderly and unwarranted market dynamics that pose a serious threat to the transmission of monetary policy across the euro area. The size of purchases under this instrument is not restricted ex ante and will depend on the severity of the risks facing monetary policy transmission.

[5] "*The outstanding amount of Eurosystem refinancing operations increased by €1.2 trillion since the end of 2019, standing at €1.8 trillion at the end of 2020. This can be largely attributed to the €1.75 trillion allotted in the TLTRO III series, in addition to the €26.6 billion allotted in the PELTROs. The voluntary repayments of €192 billion and the maturity of €303 billion of the TLTRO II series only to a small extent counterbalanced the increase in outstanding operations. Banks were given the opportunity to roll over previous TLTRO outstanding amounts in the June, September and December 2020 TLTRO III operations. The weighted average maturity of outstanding Eurosystem refinancing operations increased from round 1.2 years at the end of 2019 to around 2.4 years at the end of 2020*". ECB Annual Report 2020.

[6] ECB's New Anti-Fragmentation Tool to Reduce Fiscal Risks as Rates Rise. Fitch Rating. 03 Aug, 2022. https://www.fitchratings.com/research/sovereigns/ecbs-new-anti-fragmentation-tool-to-reduce-fiscal-risks-as-rates-rise-03-08-2022

In July, September, October and December the ECB decided to gradually raise intervention rates. The interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility were increased to 2.50%, 2.75% and 2.00% respectively, with effect from 21 December 2022.

Finally, at the meeting on 27 October the Governing Council decided to adjust the interest rates applicable to TLTRO III. From 23 November 2022 until the maturity date or early repayment date of each respective outstanding TLTRO III operation, the interest rate on TLTRO III operations will be the average interest rate on the deposit facility over that period.

In sum, the actions of the monetary authorities have been shaped by developments.

In 2020, the pandemic required the ECB to provide liquidity to the system to avoid a paralysis of economic activities, which led to massive purchases of financial assets in the secondary market, mainly government bonds, and the granting of financing to credit institutions on favourable terms to encourage the maintenance of the flow of credit to the economy, all in a scenario of very low interest rates.

Actions that continued throughout 2021[7], in a more moderate manner in the purchase of assets, in line with a general improvement in the economic situation, but with the shadow of inflation that began to be felt in the last part of the year due to the rise in fuel prices.

In 2022, with the outbreak of the war in Ukraine, restrictions on Russian gas deliveries to Europe were added to a slight slowdown in supply that has been dragging since the pandemic, leading to a sharp increase in fuel prices, affecting many productive sectors and pushing inflation to double-digit levels not seen in developed economies since the oil crisis of the 1970s.

The response of the ECB, of central banks in general, is primarily aimed at containing inflation and the main monetary policy instrument in such a situation is to raise intervention interest rates.

After six years with the intervention rate at zero[8], the raising of interest rates by the European Central Bank (chart 1) has been reflected in higher market rates, both short and longer term, and, just as important for banking intermediation as the increase, has given rise to a positively sloping yield curve (chart 2).

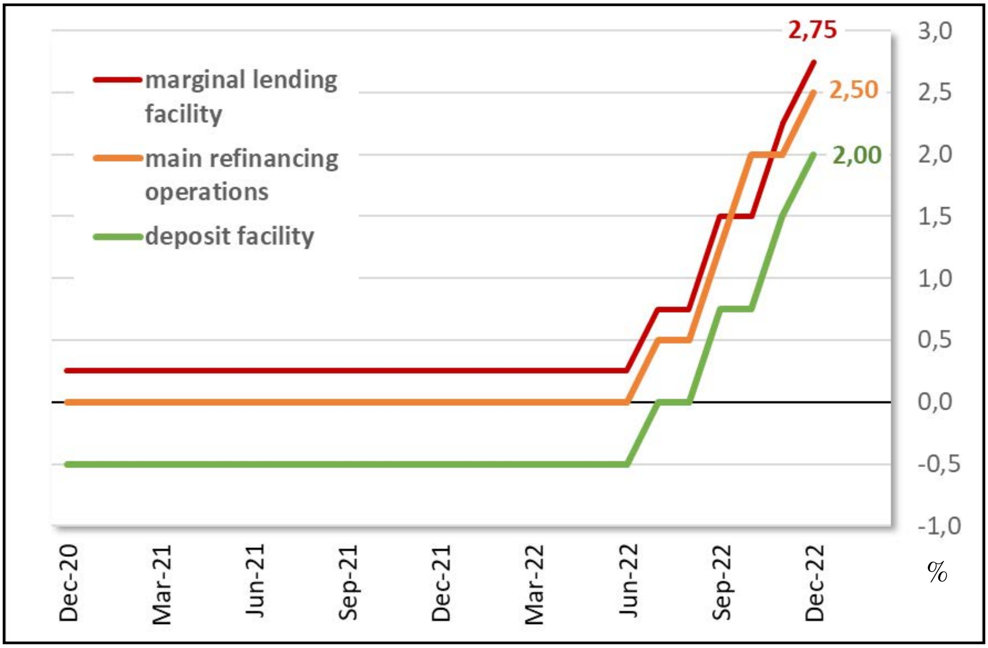
The normalisation of interest rates, i.e. the shift from negative to positive rates and from a flat to a positively sloping yield curve, combined with a scenario in which there are no liquidity constraints, is theoretically more favourable for the development of

[7] "*The outstanding amount of Eurosystem refinancing operations was €2.2 trillion at the end of 2021, representing an increase of €409 billion since the end of 2020. This increase reflects the net impact of the amount allotted in the TLTRO III series, which was €449 billion in 2021. The voluntary early TLTRO III repayments of €139 billion and the maturing of €15.7 billion of the TLTRO II series and of €23.2 billion of PELTROs (net of the amount allotted in 2021) had a limited impact on the overall outstanding amounts. The weighted average maturity of outstanding Eurosystem refinancing operations decreased from around2.4 years at the end of 2020 to around 1.74 years at the end of 2021.*" ECB. Annual Report 2021.

[8] The interest rate of the ECB's main refinancing operations has been zero percent from March 2016 until June 2022.

banking activity, insofar as it allows the transformation of maturities with a spread that can compensate, among other things, for credit risk.

Chart 1: Key ECB interest rates for the euro área (last date November, 30).



Source: Banco de España.

However, high inflation and rising interest rates generate undesirable economic effects (restriction of activity, higher production costs, higher unemployment, etc.), which will potentially be reflected in higher credit defaults and higher provisioning, thus constraining bank results[9].

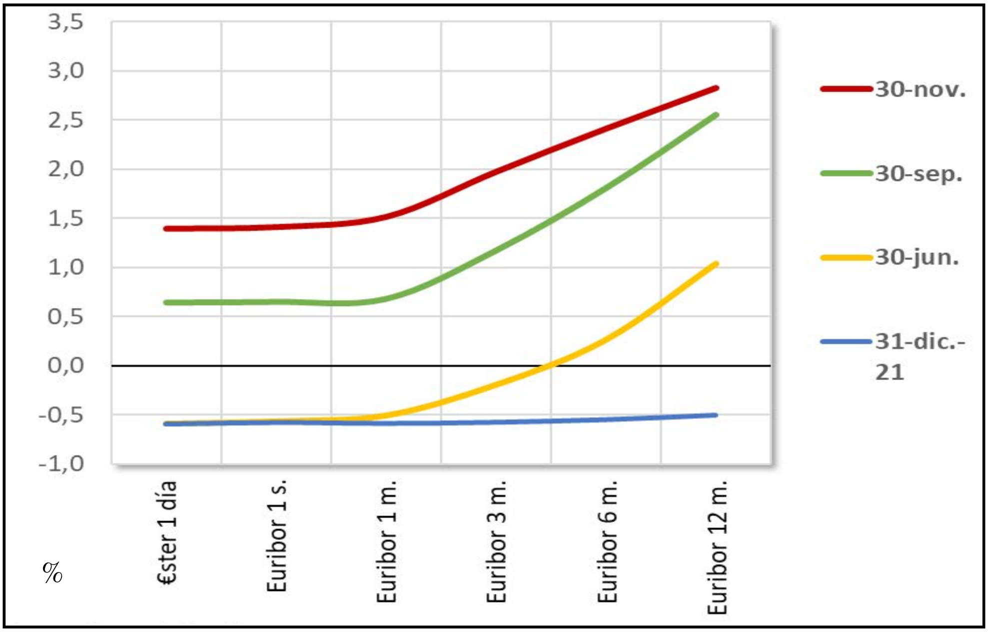
4.2.3. FISCAL POLICY

The fiscal policy measures developed by governments to cope with the pandemic have had as their main objective the maintenance of economic activity, which was affect-

[9] In the same vein, see: Speech by Luis de Guindos, Vice-President of the ECB, at the 25th Frankfurt Euro Finance Week. Frankfurt, 14 November 2022.

"*Higher interest rates are supporting euro area banks' profitability, with interest margins improving.* [...] *The outlook is, however, clouded by a weaker macroeconomic backdrop which is not yet reflected in loan loss provisions and overall lending volumes. Inflation is also pushing up operating expenses for banks, whose profitability was strongly supported by cost-cutting efforts over the past years.*" https://www.ecb.europa.eu/press/key/date/2022/html/ecb.sp221114_1~666e64bcc4.en.html ed both by the health risks themselves and by the measures that the authorities had to take to restrict the spread of the virus, mainly by limiting mobility, which had a strong impact on the exchange of goods and services.

Chart 2: Euribor in 2022.



Source: Banco de España.

Governments made a major budgetary effort to mitigate the economic effects of the crisis by implementing temporary employment regulation programmes, increasing health spending, providing aid to businesses and households, and granting public guarantees for business financing.

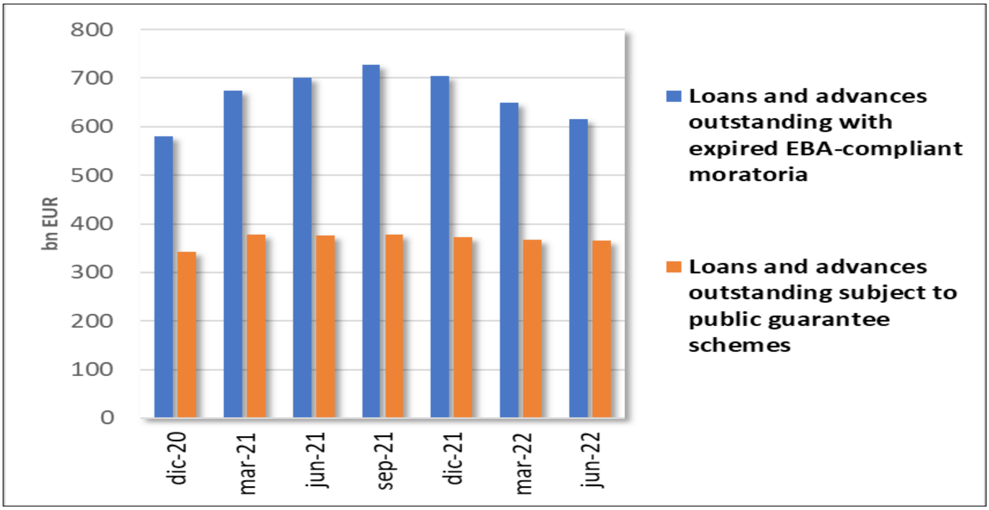
Banks played a leading role in the implementation of some of these provisions, in particular those related to maintaining the flow of credit to the economy and measures to provide relief to borrowers, both to firms suffering a drastic reduction in sales revenue and to households affected by the contraction in employment. In addition to the legal provisions, the banking sector's own initiatives made it possible to contain the decline in activity, which would otherwise have had dramatic consequences.

The two main tools used in the banking sector were the granting of payment moratoria, the purpose of which was to temporarily postpone, and in some cases reduce, principal and/or interest repayments on bank debts[10], and the granting of public guar-

[10] Some of these measures had no fiscal cost to the State; however, we have included them in this section on fiscal policy because they form part of packages of measures of a different nature, adopted simultaneously and for the same purpose.

antees for corporate financing, accompanied even in the countries with the greatest fiscal leeway by direct aid. The decisive action of credit institutions and their own contribution to this effort enabled the mobilisation of a significant volume of credit at a time when, in the absence of these measures, the financing possibilities of the sectors concerned could have been compromised.

Chart 3: Overview on EBA-compliant Moratoria and Public Guarantee Schemes (PGS).



Source: EBA. Risk Dashboard

It is worth noting the rapid response of the European institutions which, among other measures, led to the modification by the European Commission of the Temporary State Aid Framework or the decisions of the European Banking Authority regarding the adequacy of the prudential and accounting treatment of moratoria[11], decisions that were backed by the European Central Bank and the national supervisors (the Bank of Spain in our country[12]).

As of June 2022 (chart 3), the European banks hold 616 billion euros in loans with expired moratoria on their balance sheets, 44% of which are loans to households.

A further 365 billion euros corresponds to loans subject to public guarantee schemes, which are guaranteed for 76% of their amount. Overall, more than 8% of outstanding loans to businesses and households have benefited from one of these measures.

[11] EBA. Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis. EBA/GL/2020/02.
https://www.eba.europa.eu/regulation-and-policy/credit-risk/guidelines-legislative-and-non-legislative-moratoria-loan-repayments-applied-light-covid-19-crisis

[12] Banco de España. Nota informativa sobre el uso de la flexibilidad prevista en la normativa contable ante el shock causado por el COVID19.
https://www.bde.es/f/webbde/GAP/Secciones/SalaPrensa/NotasInformativas/Briefing_notes/es/notabe300320.pdf

4.3. THE STARTING POINT FOR EUROPEAN BANKS

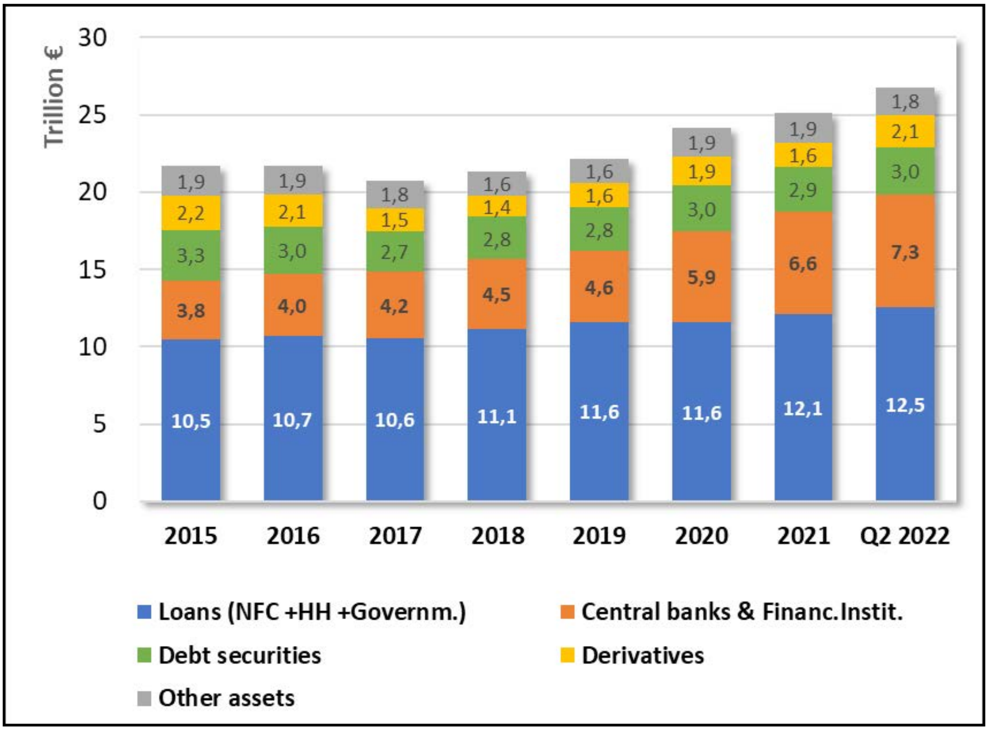
4.3.1. RECENT DEVELOPMENTS IN BANK BALANCE SHEETS

4.3.1.1. The balance sheet of European banks

In aggregate terms, the balance sheet of European banks[13], which with slight variations had been hovering around 21,500 billion euros of total assets in the years preceding the Covid crisis, has significantly increased by 20% (around 4,600 billion) between December 2019 and June 2022 to over 26,000 billion by the end of the first half of 2022.

The two main reasons for this increase in the balance sheet total relate to central bank intervention and the development of standard activity (chart 4).

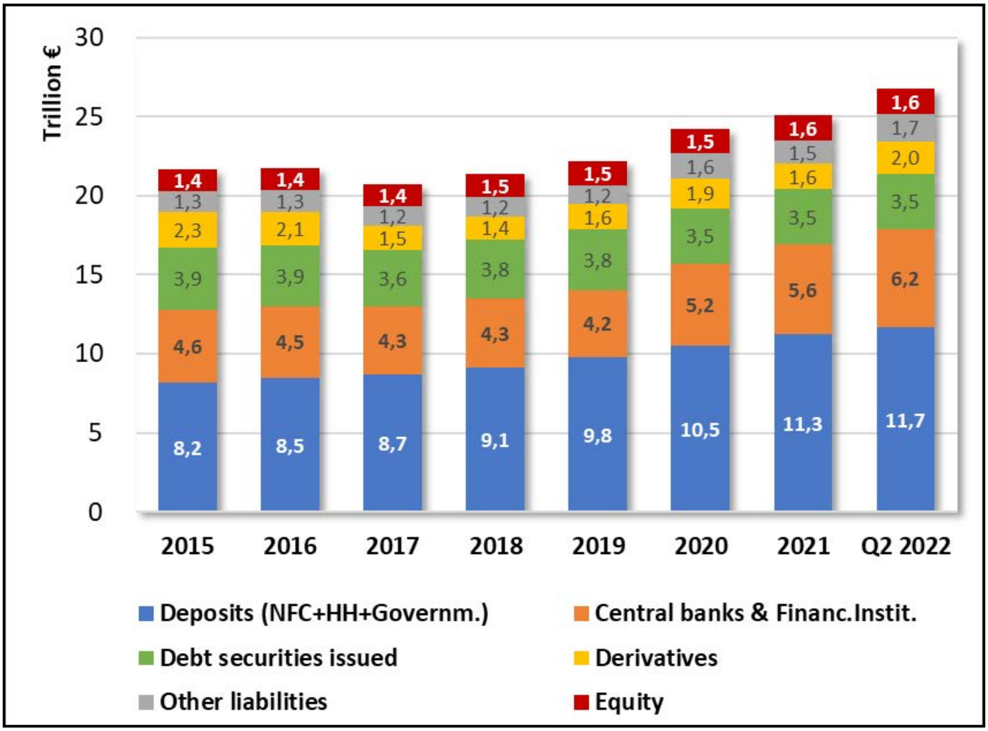
Chart 4: Balance sheet. Assets.



Source: ECB. Supervisory Banking Statistics.

[13] The sources used in this paper for the balance sheet and profit and loss figures of European banks are basically the EBA's Risk Dashboard for EU/EEA banks and the ECB's Supervisory Banking Statistics for euro area banks. It should be borne in mind that, in both cases, they refer to financial information on a consolidated basis (thus including global activity) for a significant set of European banking groups (basically, significant institutions). The differences in perimeter between the two sources do not significantly affect the figures shown in this paper.

Chart 4: Balance sheet. Liabilities & Equity.



Source: ECB. Supervisory Banking Statistics.

The measures adopted by central banks from 2020 onwards to intervene in the secondary debt market and to tackle a possible lack of liquidity and support bank financing of the economy, have resulted in an increase in the reserves held by European institutions at central banks of more than 2,300 billion euros. This figure explains half of all asset growth between the two dates (December 2019 to June 2022). On the funding side, loans provided by central banks to the euro area banking system have increased by 1,300 billion and total 2,100 billion by June 2022.

As far as typical banking activity is concerned, loans and deposits to households and firms, which in both cases represent the most important items in the balance sheet structure, are the main factor behind balance sheet growth, albeit with some differences in the intensity of growth.

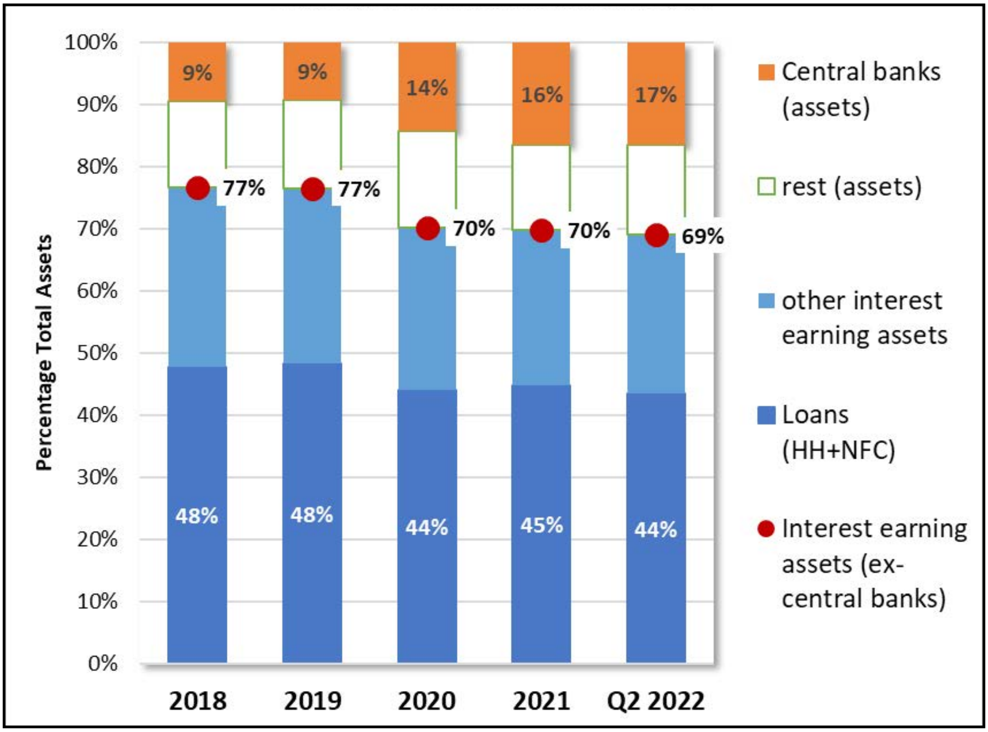
Credit has been doubly affected: by the contraction in activity caused by the pandemic and the measures aimed at minimising its effects and, in the opposite direction, by the initiatives of both governments, mainly in the form of public guarantees, and by those already mentioned by the central banks. Overall, the increase was 900 billion euros and represents an 8% rise compared with December 2019.

Deposit growth by19% since December 2019 has been more intense and sustained over time despite the crisis, with special importance of household deposits that show an increase of 1,000 billion and have been growing for the past 7 years at an average year-on-year rate of around 4%.

4.3.1.2. Changes in the balance sheet structure

The massive central bank interventions largely explain the changes observed in the structure of European banks' balance sheets (chart 5). In aggregate terms, the two main effects that are likely to affect banks' income statement margins relate to the change in the ratio of assets/liabilities generating interest income and expenses and to the effect, which is difficult to anticipate, of changes in the European Central Bank's intervention rate policy.

Chart 5: Balance sheet structure. Assets.



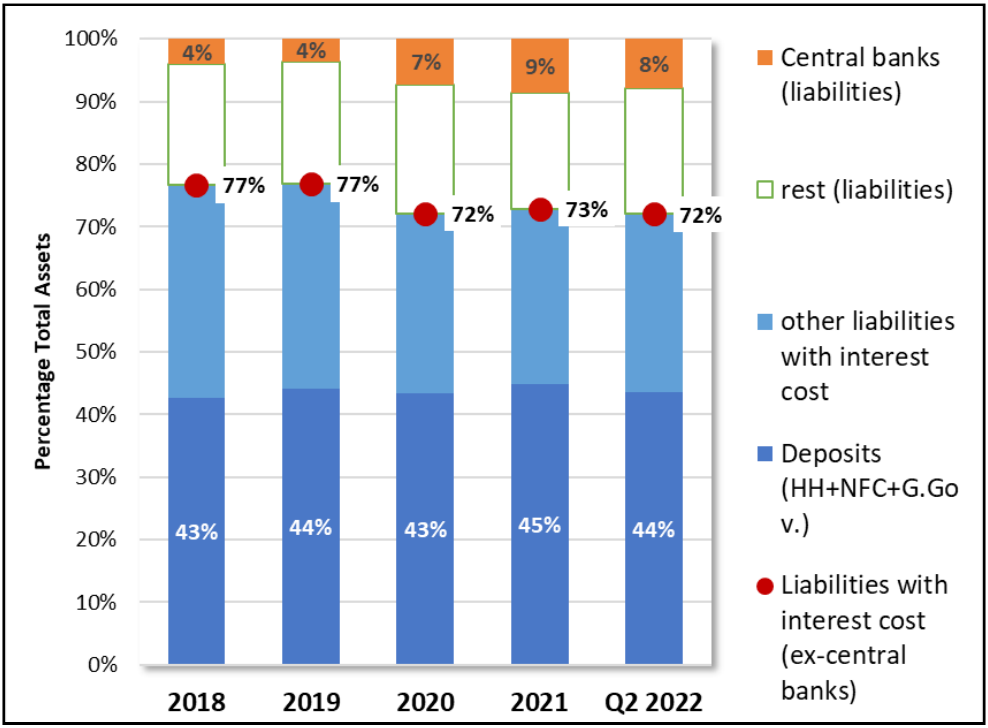
Source: ECB. Supervisory Banking Statistics.

With regard to interest-earning assets and interest-bearing liabilities (ex central banks), the typical relationship has been reversed (in 2015: 75% assets vs. 73% liabilities) and from 2020 the weight in the balance sheet as a whole of interest-bearing liabilities exceeds that of interest-earning assets, due to the joint effect of the increase in customer deposits, which have maintained their weight in the funding structure, and, in the opposite direction, by the loss of weight of credit, not so much because its volume has declined, but because of the important role that reserves are playing in the structure of bank assets, so that in June 2022 the ratio is 69% assets vs. 72% liabilities (ex central banks).

In sum, the increase of interest rates is less favourable than in the past, due to this structure effect by which interest-earning assets are lower than interest-bearing liabilities.

However, it is difficult to anticipate whether this effect will be offset by other changes in the structure of the balance sheet, to which we will refer below, which work in the opposite direction. Notably by the reduction in the weight of government debt holdings on the assets side (-2 percentage points), i.e. of the least profitable assets, and, on the liabilities side, of debt instruments issued (-4 percentage points), among the most expensive liabilities.

Chart 5: Balance sheet structure. Liabilities.



The second element to consider is the volume of assets and liabilities with central banks, which in June 2022 represented no less than 17% of total assets and 8% in the case of liabilities, and whose influence on margins is determined by the fact that these are balances with intervened interest rates, the level of which is set discretionally by the central bank in line with the needs of monetary policy.

Initially, in the euro area, the loans granted by the ECB in the form of TLTRO III were granted with a term and for a time at a rate (even negative) below the deposit facility; an incentive rate differential that was intended to maintain the flow of credit to the real economy and that meant a contribution to the interest margin of those European banks that, in effect, made the effort to assume the risks of increasing financing to companies and households in a situation of high uncertainty.

This context has dramatically changed with the decisions adopted by the ECB on October and December 2022, which resulted in the increase of intervention rates (2.50%, 2.75% and 2.00% on main refinancing operations, marginal lending facility and deposit facility respectively) and, in particular, modified the interest rate on TLTRO III for which, as of 22 November 2022 and until maturity or early repayment, the interest rate shall be the average interest rate on the deposit facility over that period, eliminating the spread existing until that date.

Therefore, in aggregate terms, with effect from the last month of the financial year 2022, the 2 trillion euros of TLTRO III that banks have borrowed from the ECB and an equivalent amount of reserves deposited with the central bank will cease to generate net interest income. As for other balances with the ECB, the return to normal interest rates referred to in a previous section means that the cost of obtaining funding from the central bank (2%) exceeds the remuneration of reserves (1.5%) for European banks, and that the remuneration of these[14] (whose volume in October 2022 exceeds the funds borrowed by 2 trillion euros) could be insufficient to offset the increase in funding costs due to the impact of the rise in rates on other interest-bearing liabilities.

4.3.1.3. Assets side

4.3.1.3.1. CREDIT TO THE PRIVATE SECTOR

Continuing with the breakdown of interest-bearing assets, approximately 44% of total assets corresponds to loans to households and non-financial corporations, which constitute, both in terms of volume and profitability, the main source of financial income for European credit institutions.

The increase in their contribution to the margin, due to the rise in interest rates, underlies the announced expectations of an improvement in banking results.

There have been no significant changes in recent years in the sectoral structure of credit. Loans to households account for approximately 39% of total credit, while loans to non- financial corporations account for 36%, a slight increase of two percentage points since 2015.

With a view to net interest income, there are two aspects to be taken into consideration. The first relates to the fact that the rise in interest rates is part of the monetary policy measures aimed at "cooling" the economy and, therefore, contracting activity and credit; it cannot be ruled out, therefore, that credit volumes will be negatively affected. Secondly, the response of financial income to higher interest rates depends on the maturity of transactions and the fixed or variable component of the interest rate. Moreover, this component varies considerably between Member States' banking systems.

The response to interest rate changes is not immediate for variable rate loans, but

[14] On 27 October 2022, the ECB decided to align the rate on deposit facilities and reserve requirements.

depends on the rate review period which, in the case of household mortgage loans, is often semi-annual or even annual, with significant differences between jurisdictions. In the case of fixed-rate loans this period is logically much longer.

As regards the different composition of portfolios in the Member States (chart 6): "*While at the euro area level around 70 per cent of outstanding loans to households are at a fixed interest rate, this share is as high as around 90 per cent in France and Germany and as low as 25 per cent in Spain and Italy. This in turn points to relevant differences in the speed at which interest rate changes are passed through to households and firms*".[15]

Chart 6: Share of fixed-rate loans for households and firms in the euro area.

Source: EBA (BSI). Latest observation: August 2022.

Based on information published by the ECB (data as of June 2022), roughly 43% of the balances in the portfolio of loans to households and non-financial corporations are with an agreed or a residual maturity up to 1 year or with a residual maturity over 1 year but with an interest rate reset in the next 12 months (chart 7).

That is, based on the residual maturity and the fixed or variable rate of the loans, 43% of the total (just under 5,000 billion euros of the balance) will see the interest rate of the operations being updated in the next 12 months. But for the remaining 57% (some 6,500 billion euros of the balance) it will take more than a year for the rise in interest rates to be reflected in their profitability and thus in their contribution to net interest income.

[15] Speech by Philip R. Lane, Member of the Executive Board of the ECB, at the SUERF, CGEG|COLUMBIA|SIPA, EIB, SOCIÉTÉ GÉNÉRALE conference on "EU and US Perspectives: New Directions for Economic Policy", New York, 11 October 2022.

Chart 7: Volumes of outstanding amounts of euro-denominated loans to euro area residents. (EUR billions; June 2022).

	Households	Non-financial corporations	
With an agreed maturity up to 1 yr.	232	870	
For house purchase	*12*		
Consumer credit and other loans	*220*		
With and agreed maturity of over 1yr and:			
a residual marturity up to 1yr.	177	403	
over 1 yr, i.r.r. in the next 12 months	1.598	1.589	% over total
Interest rate reset in the next 12 monts	**2.007**	**2.862**	43%
Interest rate reset after the next 12 monts	**4.513**	**1.998**	57%

Source: ECB. MFI interest rate statistics.
i.r.r. = interest rate reset

Therefore, in the aggregate terms in which we are formulating these reflections, it is not possible to anticipate the effect in the short term of the combination of the reduction, if it occurs, in the volume of credit, with the sensitivity of the portfolio to rate rises in terms of the proportion of fixed or variable rate operations and, furthermore, with the speed of response to changes in terms of maturity or reset in the interest rate of operations. This leaves aside competition within the sector and with other non-bank providers of financing to companies and households.

4.3.1.3.2. DEBT SECURITIES

The second group of assets which, in terms of volume, make up the interest-earning assets are debt securities.

Portfolios of debt instruments, mostly government bonds, have lost some weight in the balance sheet structure in recent years, yet continue to account for 11% of total assets.

These are fixed-rate instruments which, as long as they remain on the balance sheet, will not increase their contribution to the interest margin and which, conversely, will experience decreases in their market value, which institutions will have to reflect in their profit and loss account in the case of instruments valued at fair value through profit or loss, or in their equity accounts in the case of those valued at fair value through other comprehensive income.

Therefore, the influence of debt securities on margins is twofold: in valuation losses on fair value portfolios and in maintaining their contribution to net interest income, which only as portfolios are rolled over will reflect increases in interest rates.

4.3.1.4. Liabilities side

4.3.1.4.1. DEPOSITS

Regarding interest-bearing liabilities, the main source of funding for European banks is deposits from households and non-financial corporations, which together account for 41% of total assets[16] and have shown a high level of dynamism in recent years, with a cumulative annual growth rate of more than 5% since 2015 (the total balance sheet has grown at less than 3%).

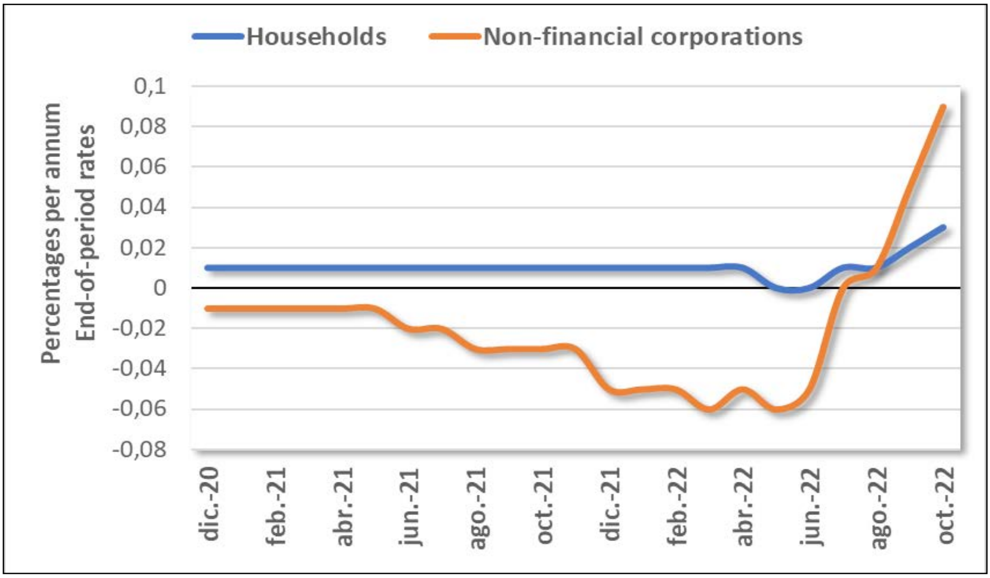
Although both corporate and household deposits have experienced strong increases in balances, they have not done so at the same pace and have not responded equally to the interest rate scenario (chart 8).

Overall, European credit institutions have not passed on negative interest rates to households and have maintained a remuneration very close to zero, but not negative, and even slightly positive in the case of time deposits.

In the case of non-financial corporations, the remuneration of deposits, virtually all of which are demand deposits, has remained negative in line with interest rates in wholesale markets.

This different sensitivity to rate variations becomes apparent with the change in trend. The speed of response of the remuneration of non-financial corporate deposits is significantly faster than that of household deposits and from August 2022 onwards it has entered positive territory. And in both cases, corporate and household deposits, the rise is apparently proving less intense than that observed in new lending operations[17].

Chart 8: Interest rates. New euro-denominated deposits from euro area residents. Overnight (*).



Source: ECB MFI interest rate statistics. (*) For this instrument category, new business and outstanding amounts coincide.

[16] This percentage rises to 44% if deposits taken from general governments are included, which account for around 2% of total assets and show similar stability to households and non-financial corporations

[17] It should be noted that, in the comparison of recent developments in lending and deposit rates, the former are time loans and the latter demand deposits and that the yield curve has taken a markedly positive slope.

4.3.1.4.2. DEBT SECURITIES ISSUED

The weight of debt financing has been declining on the balance sheets of European institutions as interest rates have fallen and other sources of lower-cost funding have become available, so that they now account for 13% of total assets.

Their composition is very heterogeneous in terms of the nature of the instruments, their cost and residual maturity, and includes both covered bonds and subordinated securities issued for the purpose of meeting minimum capital and MREL requirements.

Again, the impact on financial costs is not expected to be immediate and will be reflected in the pace of new issues which, in situations of uncertainty, are usually accompanied by a sharp increase in the remuneration required for the most subordinated securities.

It should also be borne in mind that the composition and volume of securities issued is conditioned by the aforementioned regulatory requirements, which considerably limit banks' decision-making capacity. For example, in 2019, 2020 and 2021, the volume of senior unsecured preferred securities issued by European banks (eligible for MREL) exceeded that of non-preferred and even covered bonds[18].

4.3.1.5. Other interest-bearing assets and liabilities

A final group of assets and liabilities whose response to interest rate changes is significant for European banks' results is loans and deposits held with credit institutions and other financial corporations.

In aggregate terms, European banks maintain a net borrowing position and, with some nuances, their balances would represent the net resources borrowed from other credit institutions outside the euro area and the funding provided to credit institutions by the rest of the financial system (investment and pension funds, …).

Overall, the volume amounts to around 1 trillion euros. These are typically short-term balances and very sensitive to interest rate movements, as is characteristic of wholesale markets.

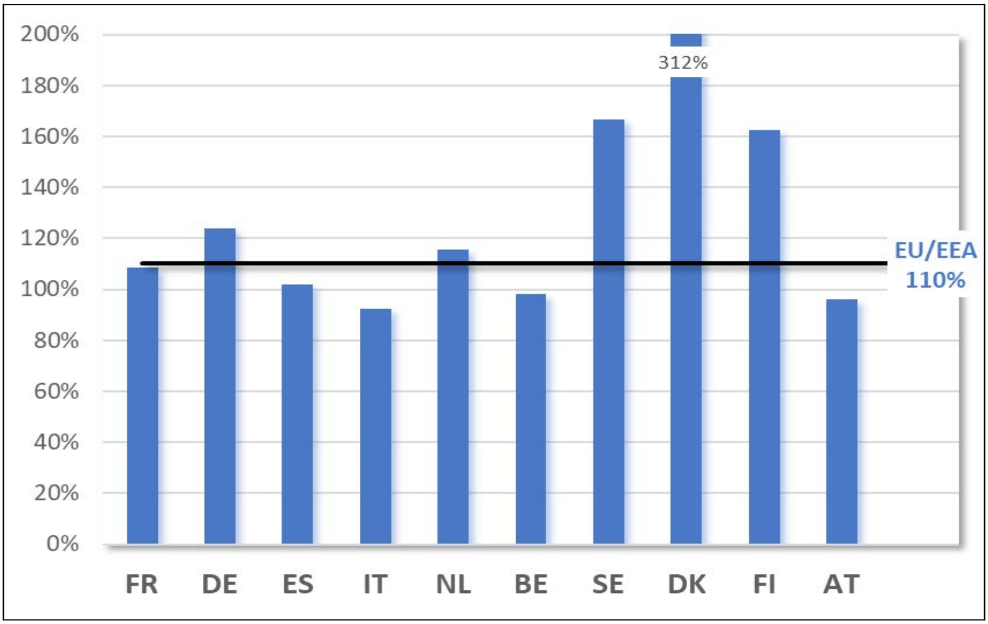
4.3.1.6. Loan-to-deposits ratio

The loan-to-deposits ratio is a proxy of the activity and then liquidity needs of credit institutions and, indirectly, of the need to tap the market (or the central bank) that would justify the balances discussed above.

Currently, in the euro area and in the European Union as a whole, the ratio is, on average, close to 100%. However, the dispersion is enormous, both by country (chart 9) and by banks' business models (chart 10), so it is difficult to connect this ratio with the net borrowing position with other financial intermediaries which, in aggregate terms, European banks hold, as referred to in the previous section.

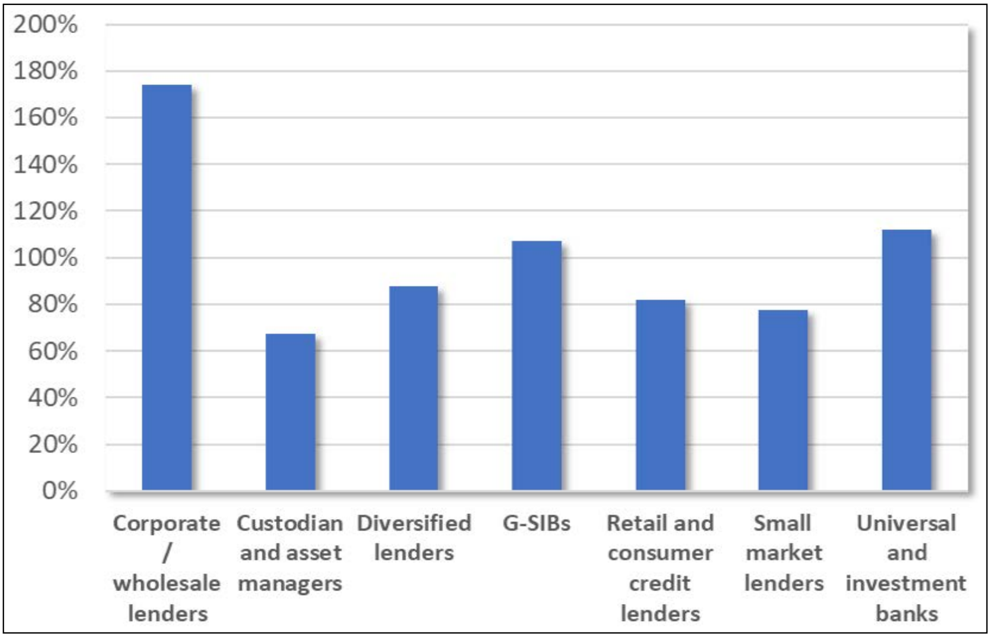
[18] EBA. Risk assessment of the European banking system, December 2021, page 51.

Chart 9: Loan-to-deposit ratio for households and non-financial corporations.



Source: EBA Risk Dashboard Q2 2022.

Chart 10: Loan-to-deposit ratio (%). Business model.



Source: ECB. Supervisory Banking Statistics Q2 2022.

4.3.2. EQUITY AND REGULATORY CAPITAL

4.3.2.1. Equity

To complete the description of the structure of European banks' balance sheets, equity has remained stable at around 6% of total assets in recent years, with slight changes in its structure in favour of a greater weight of reserves, reflecting the efforts made to capitalise earnings, and with a slight decrease in minority interests.

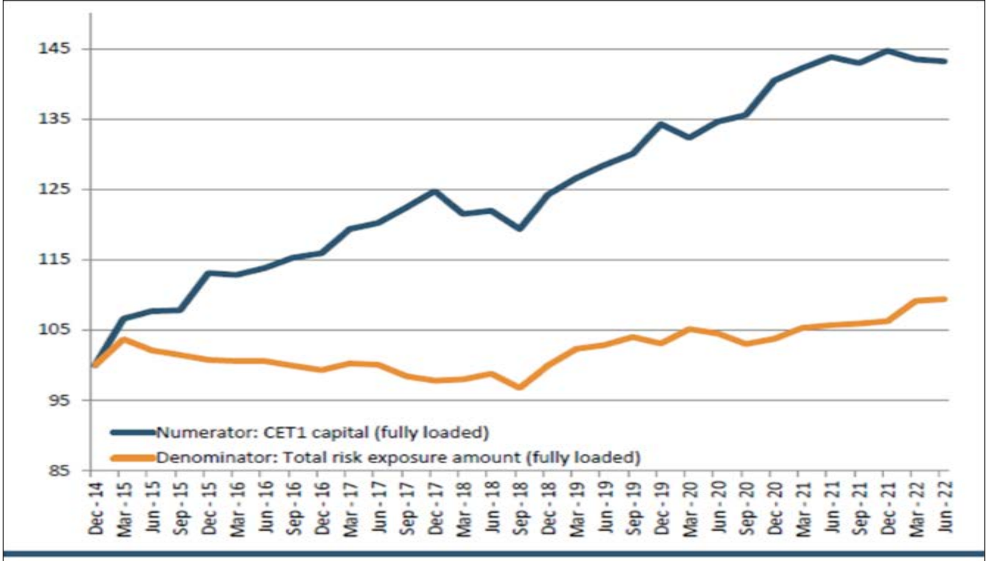
4.3.2.2. CET 1 and leverage

Minimum capital requirements are set by prudential regulation in terms of the ratio between instruments eligible for regulatory capital (the highest quality instruments in the case of common equity tier 1 or CET 1) and risk weighted assets (RWA).

As regards the numerator, which is the highest quality equity eligible as capital, it has grown steadily in recent years. According to EBA data as of June 2022, it would be 40% higher than in 2014 (chart 11). As for the denominator, RWAs, they would have grown by only 5%. This growth is explained, on the one hand, by the increase in assets. On the other hand, by the different risk weighting of these assets due to changes in the structure, nature and credit quality.

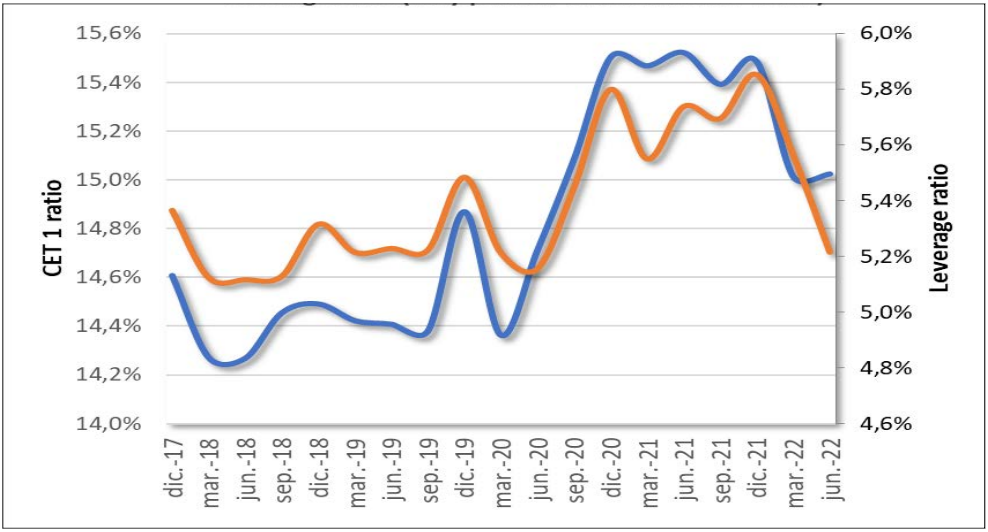
The aggregate effect is that European banks have maintained a CET1 ratio of around 14.5% in the years immediately preceding the pandemic crisis, increased by one percentage point in 2020, partly due to the ECB's recommended cap on dividends that year, and remain at 15% in June 2022 (chart 12).

Chart 11: CET1 ratio (fully loaded).



Total numerator and denominator.
Dec 2014 =100.

Chart 12: CET1 & Leverage ratios.



Source: EBA Risk Dashboard.

The leverage ratio, which relates capital, tier 1[19] in this case, to non-risk-weighted exposures, has followed the same path and in June 2022 was above 5%.

In any case, the CET1 ratio and leverage ratio are above the minimum requirements of prudential regulation and supervision and represent a solid starting point for European banks to face a possible economic downturn.

4.3.3. PROFITABILITY

4.3.3.1. Profit and loss account margins. Net interest income.

Net interest income is the main item on the income statement of European banks. It may vary depending on the different business models but European banks are predominantly featured by their financial intermediation. This means that the main component of their results is determined by the spread between interest income and interest expenses, which, as we have seen, come mostly from loans and deposits.

Probably the first conclusion to be drawn from the evolution of the income statement over the last six years is that European banks have withstood reasonably well the onslaught of interest rates which, if already too low for too long, became negative since February 2016 in the case of the 12-month Euribor.

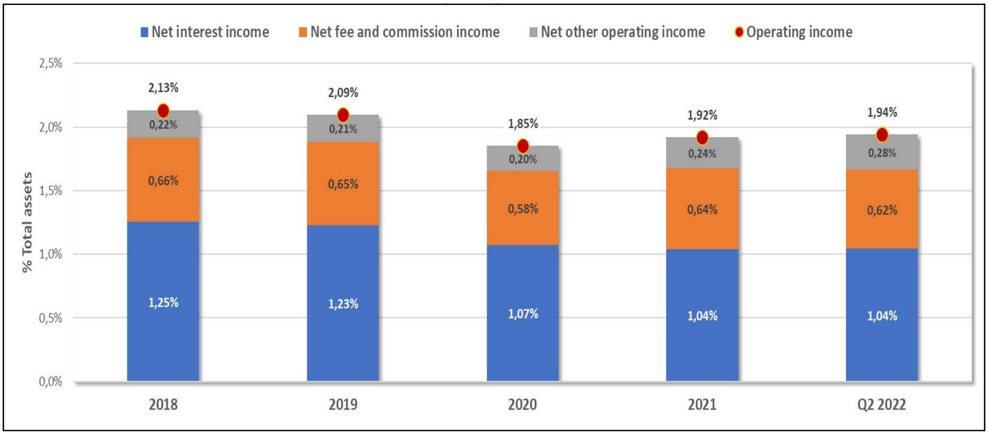
The monetary policy pursued by central banks to revive the economy after the global financial crisis of 2008 has been underpinned by the prolonged maintenance of very

[19] Tier 1 capital includes, in addition to the elements of common equity tier 1 (basically capital and reserves), the convertible perpetual subordinated debt issued by the institution.

low interest rates, which resulted in a flat, even inverted, maturity curve with disruptive effects on banks' net interest income, to the extent that it hinders the transformation of deadlines that is, together with the assumption of risks, the basis of net interest income.

During this period, the net interest margin has dropped 20 basis points of return on total assets to 1.04% in June 2022 (chart 13).

Chart 13: Operating income.



Source: ECB. Supervisory Banking Statistics. Q2 2022 annualized.

The weight of net interest income, which at no time fell below 50% of the total, continues to be the determining factor of operating income, which lost almost 30 b.p. of return on total assets; and none of its other components has been able to mitigate this effect: neither net income from fees and commissions, which remained practically constant in proportion to assets, nor the rest of its components, among which net trading income and exchange rate differences are also affected by high volatility.

As discussed in previous sections, although the normalisation of the curve and of interest rates is expected to lead to an improvement in net interest income, there are a series of factors that will affect its future evolution, both in terms of amount and maturity, which may jeopardise the expected recovery.

To summarise, the net effect on net interest income of higher rates will be affected by the following factors:

- Loans to businesses and households account for 44% of total assets. The monetary policy aimed at cooling the economy to address inflation could negatively affect to the total loans to households and businesses.
- A very high proportion of these loans to businesses and households (57% as of June 2022) will not see their interest rate change over the next 12 months.
- Debt securities, 11% of total assets, are mostly fixed rate and their contribution to the margin will only increase as holdings of instruments are renewed, which is not expected to happen for some time.

- Deposits show different sensitivities. Unlike household deposits, corporate deposits seem to be showing a faster and more intense response to the rise in interest rates. Competition between banks and with other investment alternatives (funds, for example) is an element that cannot be ignored.
- Debt securities are also fixed rate and will be renewed as they mature. But part of the issuances are non-preferred and subordinated securities issued to meet capital and MREL requirements, where the institution cannot reduce the amount and the remuneration demanded by investors is very sensitive to uncertainty.
- As mentioned in a previous section, close to 17% of total balance sheet assets and 8% of liabilities are represented by balances with central banks whose profitability/cost and, therefore, their impact on net interest income will be determined by the decisions taken by the monetary authorities, making it risky to forecast their future evolution. The TLTRO III spread will disappear as of 22 November 2022 and the normalisation of rates also affects the remaining balances with central banks in two ways: (i) the cost of the lending facilities exceeds the remuneration of the deposit facilities; and (ii) the remuneration (0.75%) of the latter, the amount of which exceeds by far that of the loans taken, is increasingly distant from what banks will be able to obtain from their regular activity (the 12-month Euribor closed October at 2.6%).
- A final group of remunerated assets and liabilities is the net borrowing position held by European banks with credit institutions and other financial intermediaries, which is presumably short-term and highly sensitive to changes in interest rates.

It will be up to individual institutions to assess how each of these factors affects their portfolios of financial assets and liabilities.

What it does seem to be clear is that the speed of the response of net interest income to rising interest rates is much slower than the rate at which interest rates are rising and that it will take some time, probably several quarters, before we see the effects.

4.3.3.2. Other components of operating income.

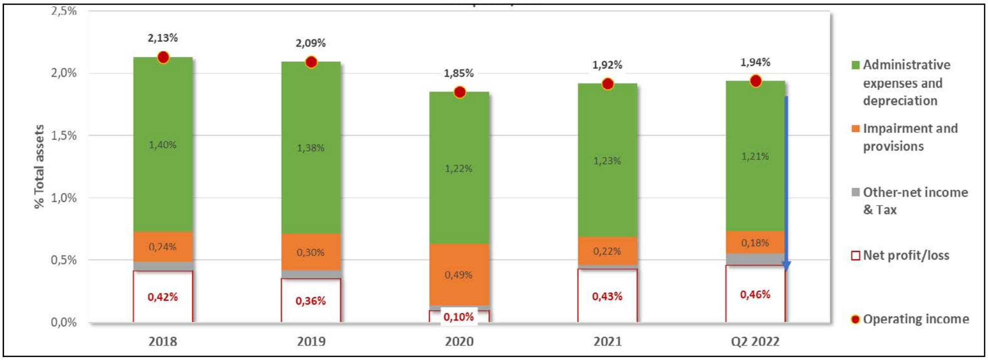
As for the components of operating income other than net interest income, the main component is net fee and commission income, which yield a return equivalent to 0.6% of total assets and account for approximately one third of total operating income, a proportion which has been increasing in recent years as net interest income has declined.

Within the high heterogeneity of fee and commission, only two aspects should be highlighted in relation to their future contribution to operating income: (i) the observation that European banks have shown an interest in improving income through this channel, offering a greater number and variety of services to their customers due, among other reasons, to the possibilities provided by digitalisation; and (ii) that the commissions received by banks are closely linked to activity, so that a possible contraction of the economy could affect the volume of income in this area.

4.3.3.3. Administrative expenses

Below operating income, administrative expenses and depreciation are the main expense item in European banks' income statements (chart 14).

Chart 14: Net profit/loss.



Source: ECB. Supervisory Banking Statistics. Q2 2022 annualized.

In recent years, European banks have been cutting administrative expenses which, as a proportion of total assets, are now 20 basis points lower than just four years ago. Despite this reduction in expenses, the aforementioned reduction in operating income has meant that there have not been widespread efficiency gains and the cost to income ratio, which in June 2022 was 62% on average in the euro area, shows notable disparities according to both the banks' business model and the different jurisdictions, with differences of up to 20 percentage points.

In any case, inflation is accompanied by a foreseeable increase in banks' operating costs. To give an idea of the importance of administrative expenses and depreciation in European banks' income statements, suffice it to point out, by way of example, that an increase of 5% per year (half the inflation rate recorded in the euro area in 2022) would, *ceteris paribus*, have the effect of reducing accounting profit by 13%, raising cost-to-income to 65% and reducing ROE by almost one percentage point.

The effort to contain expenses is therefore confronted in the current situation with the possible increase in costs caused by inflation, so that the contribution of these items to the results of the institutions cannot be expected to improve substantially, and it cannot be ruled out that the cost to income will worsen.

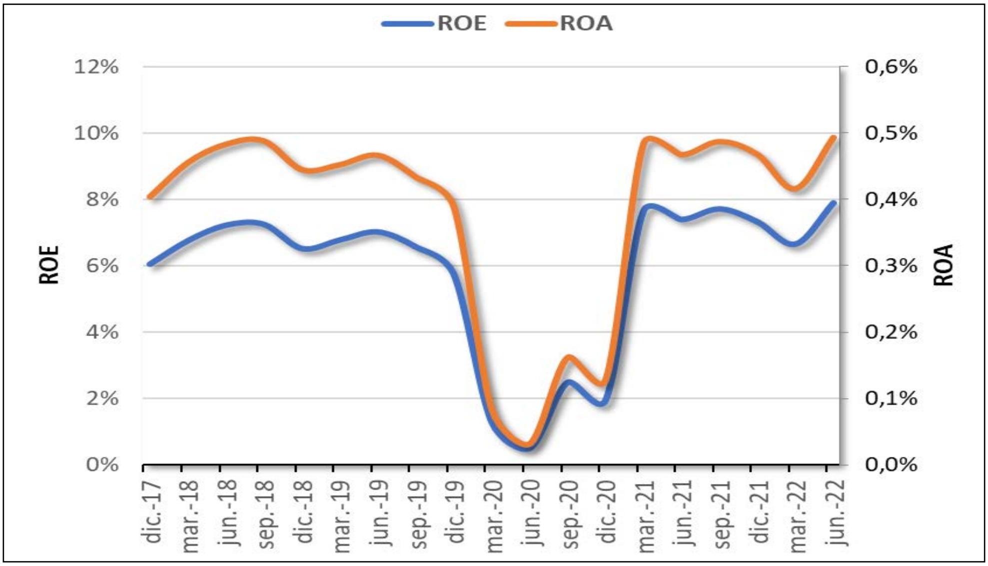
4.3.3.4. Return on assets (ROA) and return on equity (ROE)

The volume of impairment and provisions will be dealt with in the next section. As for the other items on the income statement, in aggregate terms and net of tax, they are insignificant as regards their contribution to ROA and their evolution over time is highly variable and often depends on corporate decisions of a particular nature.

Turning finally to the total result, from the perspective of return on assets (chart 15), at the end of the first half of 2022, the ROA stood at 0.46% in Eurozone banks;

a ratio which, without being the desirable optimum, shows a level of profitability that compares reasonably well with previous years, bearing in mind that during the three years prior to the 2008 crisis the average ROA was 0.50% and which, viewed with a certain time perspective, exceeds that achieved prior to those years[20].

Chart 15: Return on equity & Return on assets.



Source: EBA Risk Dashboard.

This is not the case for ROE, which is still far from pre-crisis 2008 levels (even above 10%).

As of June 2022, it is slightly below 8% and, although growing, it still faces difficulties in matching the cost of capital.

4.4. DELINQUENCY

4.4.1. THE NPLS OF EUROPEAN BANKS

4.4.1.1. Structure and recent developments

The volume of non-performing loans and advances (NPLs) on the balance sheets of European banks has declined significantly in recent years (chart 16), driven both by the initiatives of EU institutions and the European Central Bank[21] and by the development

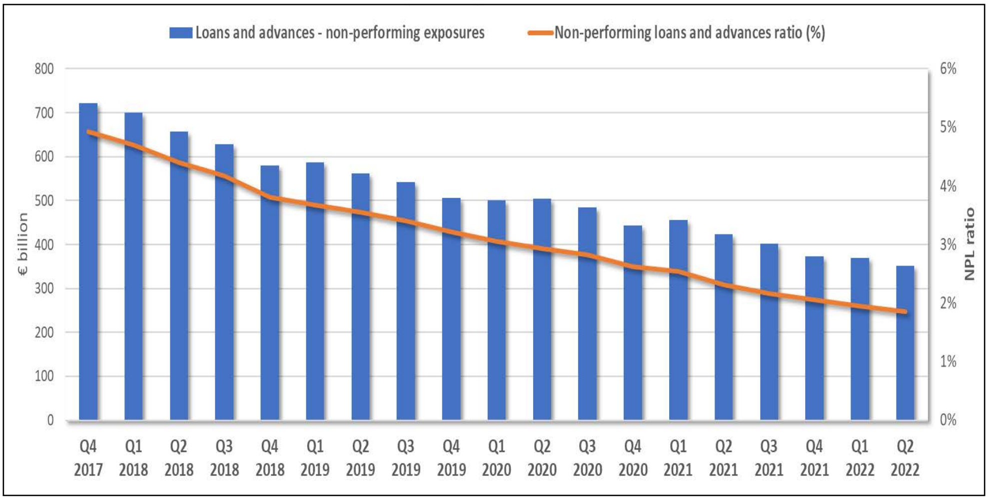
[20] BIS. Structural changes in banking after the crisis. Committee on the Global Financial System, CGFS Papers Nº 60, January 2018.

[21] ECB. Guidance to banks on non-performing loans. March 2017.

of secondary markets, which have allowed banks to dispose of impaired assets from the 2008 crisis, which led to high NPLs in all jurisdictions and especially in the countries most affected by the financial crisis.

The actions taken by the banks themselves have led to a decrease in NPLs from more than 720 billion in 2017 to less than half, 352 billion, in June 2022.

Chart 16: Non-performing loans and advances .



Source: ECB. Supervisory Banking Statistics.

The NPL ratio has been declining steadily in the years following the 2008 crisis and, with data as at June 2022, stands at 1.8%. It is worth noting that this decline continued in 2020 with the pandemic, and that it has affected all sectors, being particularly relevant in SME and CRE lending, which has gone from a NPL ratio[22] above 7.5% in 2019 to levels already close to 4% (chart 17).

As in the case of total credit to the private sector discussed in a previous section, there have been no significant changes in recent years in the structure of NPLs by sector: loans to households account for about 39% of the total, while loans to non-financial corporations account for about 55%.

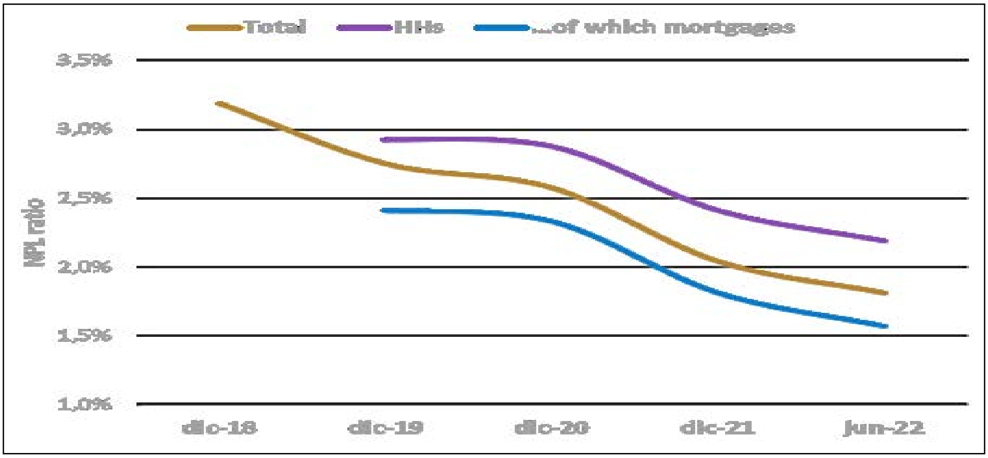
4.4.1.2. Non-performing loans by sector of activity (by NACE code).

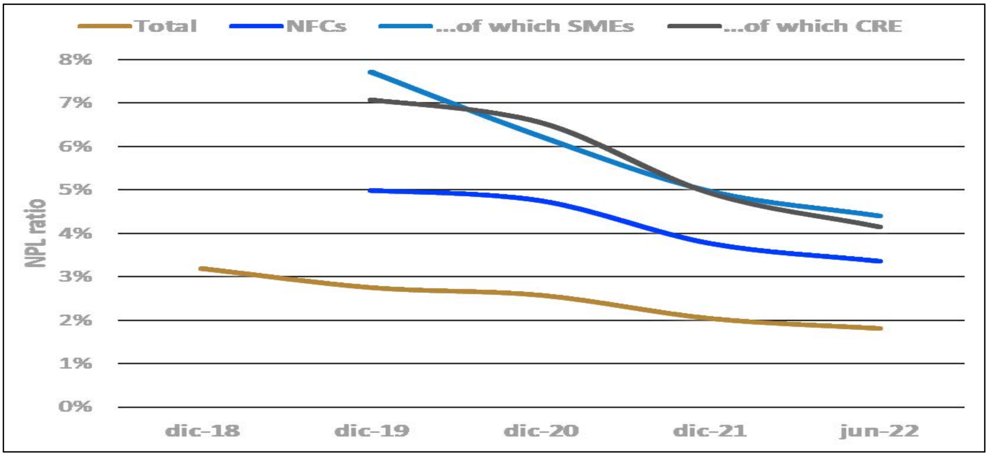
However, this reduction in NPLs in aggregate terms has not been reflected uniformly across all sectors of activity (chart 18). During 2020 the economic effects of the pandemic were felt more strongly in some sectors than in others and thus in the increase in NPLs. The most affected sectors, however, experienced moderate growth in the NPL ratio, including Accommodation and food service activities (NACE code I) and Arts,

[22] EBA Risk dashboard. Gross carrying amounts, loans and advances at amortised costs (excluding at fair value through OCI and through P&L, excluding trading exposures).

entertainment and recreation (R), which already had significantly above-average NPL ratios in 2019, 8% and 7% respectively, and saw their ratios increase by around 50 basis points. The exception was the Mining and quarrying (B) sector, where the increase in NPLs was particularly significant, at more than two percentage points, but which was quickly corrected the following year.

Chart 17: NPL ratios.



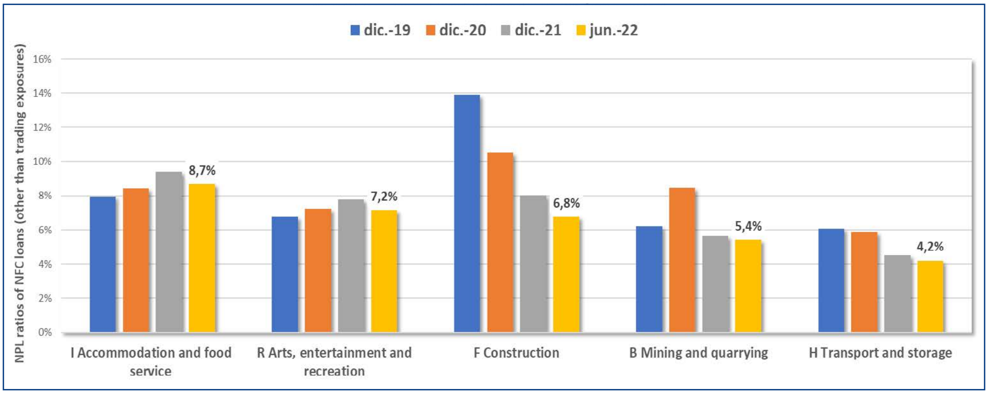


Source: EBA Risk Dashboard.

Overall, the pandemic did not have a homogeneous effect on all sectors of activity: around one third of the sectors contained their ratios (or interrupted a declining path); another third continued to reduce their NPLs, particularly in Construction (F) by more than 3 percentage points; and as noted in the remaining third the NPL ratio increased moderately.

Although the measures adopted by governments and by the institutions themselves during 2020 might have led to a certain delay in the recognition of NPLs, which would become apparent in the following quarters, the fact is that in 2021 there were no increases in the ratio other than in the two aforementioned sectors (I and R).

Chart 18: NPL ratios of NFC loans and advances by NACE code.



Source: EBA Risk Dashboard.

In June 2022 all sectors already had lower NPL ratios than in December 2020, with the sole exception of Accommodation and food service activities (I), which still has a NPL ratio of 8.7%, 20 basis points higher than in 2020, and which, together with Arts, entertainment and recreation (R), with 7.2%, rank first in terms of sectors with the highest NPLs, although it is worth remembering that they already showed high NPLs before the pandemic and that in fact the variations in the ratio since then have been small.

In contrast, the Construction sector (F) stands out, with its NPL ratio falling from almost 14% in 2019 to 6.8% in June 2022. The Transport and storage sector (H) has continued to reduce its NPL ratio, even though it was initially expected to be among those most affected by the rise in energy prices.

Overall, the five sectors (shown in the graph) with the highest ratios of NPLs as of June 2022 (above 4%) account for only 15% of total credit[23] to NFCs.

Including the next two sectors in terms of NPLs, Agriculture, forestry and fishing (A; 3.9%) and Manufacturing (C; 3.6%), the sum of all sectors with a ratio of NPLs above 3% in June 2022 is 35% of the total NFC credit at EU banks and with the exception of Manufacturing (C), which represents 16% of the total, none of the sectors has a credit volume of 6% of the total.

In summary, until June 2022, non-performing loans at European Union banks are contained, highly diversified by sectors that have, both individually and as a whole, a relatively small weight in the total credit to non-financial corporations and, therefore, in the overall portfolio of loans and advances.

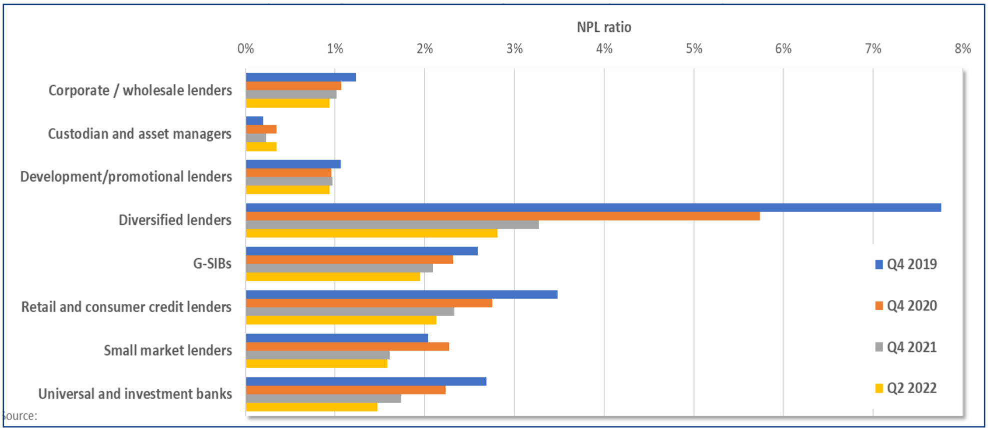
[23] EBA Risk dashboard. The data is based on gross carrying amounts, other than held for trading.

4.4.1.3. Non-performing loans by bank business model.

Turning from borrowers to lenders, it is well known that banks' NPL ratios differ significantly according to their respective business models, and if the average NPL ratio in the euro area is 1.8%, the variety of models results in a range of one percentage point above and below that average (chart 19).

However, the common feature, also in this case, is the decline in NPLs in all models, whose ratios of NPLs as of June 2022, with some exceptions in models that actually represent a minimal proportion of the market, are lower than in December 2019 and in no case does the ratio exceed 3%.

Chart 19: Nonperforming loans and advances by classification (business model).



Source: ECB. Supervisory Banking Statistics.

4.4.2. STAGE 2 AND FORBORNE EXPOSURES

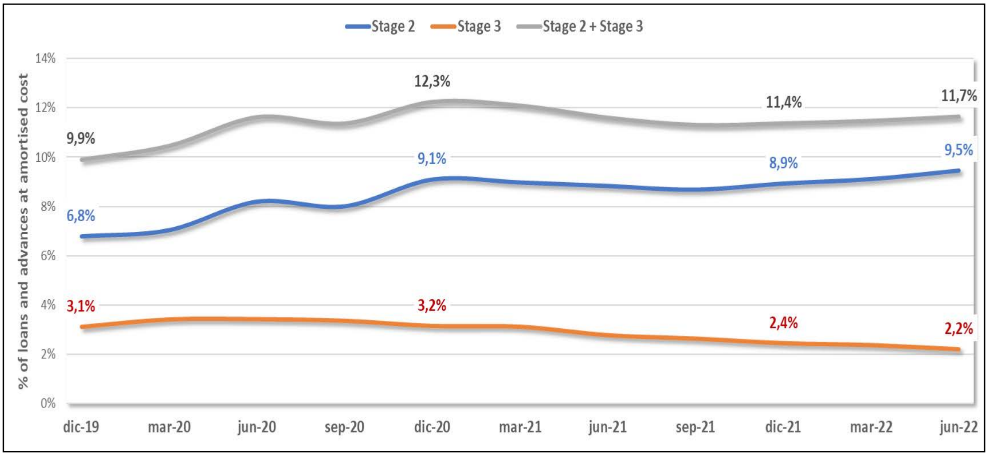
The crisis resulting from the pandemic led to the adoption of a series of measures aimed at facilitating compliance with the financial obligations of economic agents and preventing a situation, which was expected to be temporary pending the generalisation of vaccinations, as in fact occurred, from having undesirable effects on the economy.

The authorities and credit institutions implemented multiple programmes, in the form of moratoria, payment deferrals, lengthening the term of operations, etc. that were supported by supervisors and regulators, which prevented the temporary interruption of activities from leading to company closures and job losses and allowed for a rapid recovery of activity once the pandemic was under control.

The palliative effect of the decisions to support activity did not reach everyone equally and some firms and households were more affected than others. The analysis of the risk situation of their borrowers led to the reclassification by the institutions of operations which, in some cases, were subject to the relief measures and, in others, were not eligible for them.

The result was an increase in stage 2 operations[24] from 6.8% in December 2019 to 9.1% in December 2020. This level had been maintained during 2021, with a slight increase in the first half of 2022 to 9.5% (chart 20).

Chart 20: Loans and advances at amortised cost: distribution among stages according to IFRS 9.



Source: EBA Risk Dashboard.

It is premature to draw a conclusion as to whether the recent development of the stage 2 ratio, with an increase of only 50 basis points, is sufficiently indicative to say that it would already be showing a substantial increase in risk in recent quarters, and the limited past experience in this area does not seem to allow one to consider the stage 2 ratio as an unambiguous early indicator of future stage 3 developments.

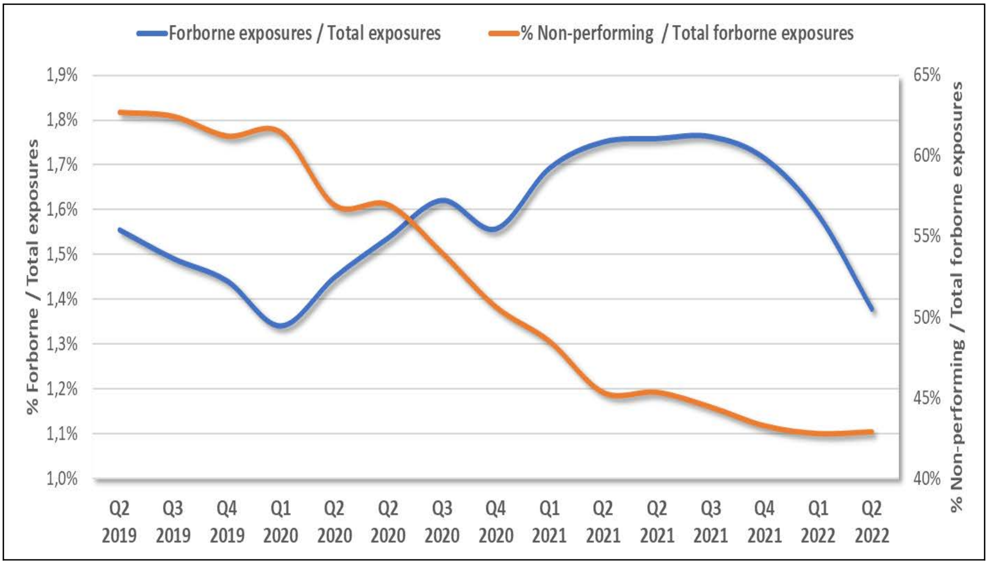
Refinancings also increased in 2020, along the same lines as mentioned above (chart 21).

In this case, however, the situation seems to have reversed and the volume of refinanced operations is, as a proportion of total exposures, similar to that existing in 2019, while the ratio of those classified as non-performing has been decreasing.

An additional indicator, which cannot be extrapolated to the credit portfolio as a whole, but which might give some indication of the segments of firms and households most affected by the succession of unfavourable events (first the pandemic and then inflation), is that relating to the evolution of loans and advances, which are being classified by institutions as stage 2, i.e. where they see a significant increase in credit risk, and whose level is close to 20%, a percentage clearly above the average loan and advances portfolio of EU institutions as a whole (chart 22). The pattern is similar for stage 3 classifications (chart 23).

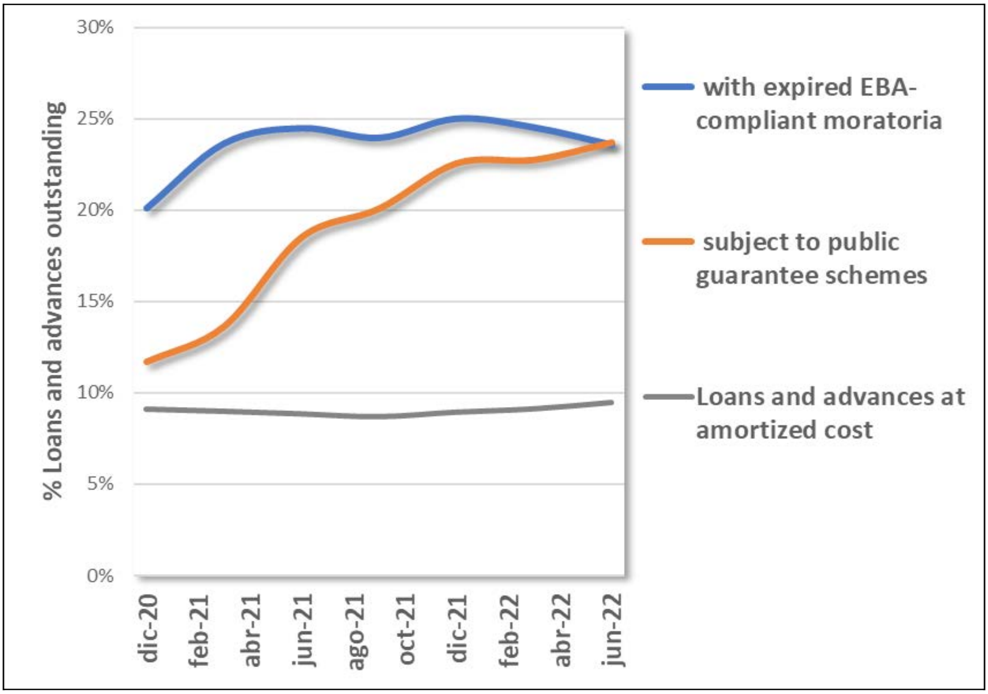
[24] In accordance with the applicable accounting standard, IFRS 9, transactions with borrowers that have experienced a significant increase in risk since initial recognition are classified as stage 2.

Chart 21: Forborne exposures.



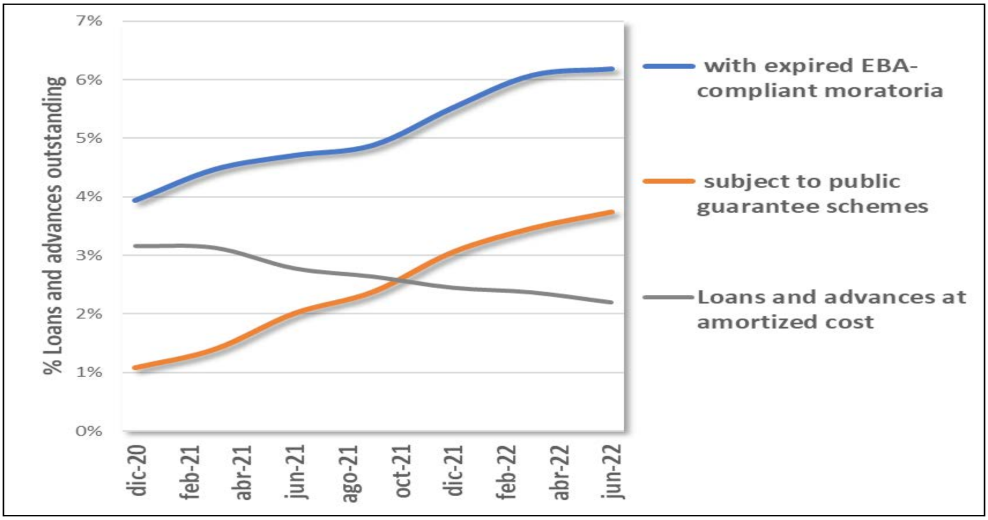
Source: ECB. Supervisory Banking Statistics.

Chart 22: Stage 2.



Source: EBA Risk Dashboard.

Chart 23: Stage 3.



Source: EBA Risk Dashboard.

4.4.3. NPL COVERAGE AND COST OF RISK

The impact of non-performing loans to credit institutions' income statements is reflected in the provisioning effort, i.e. the recognition of impairment losses on financial assets, which, to the extent that it is not used to absorb realised losses, is accumulated in the form of provisions for expected losses[25].

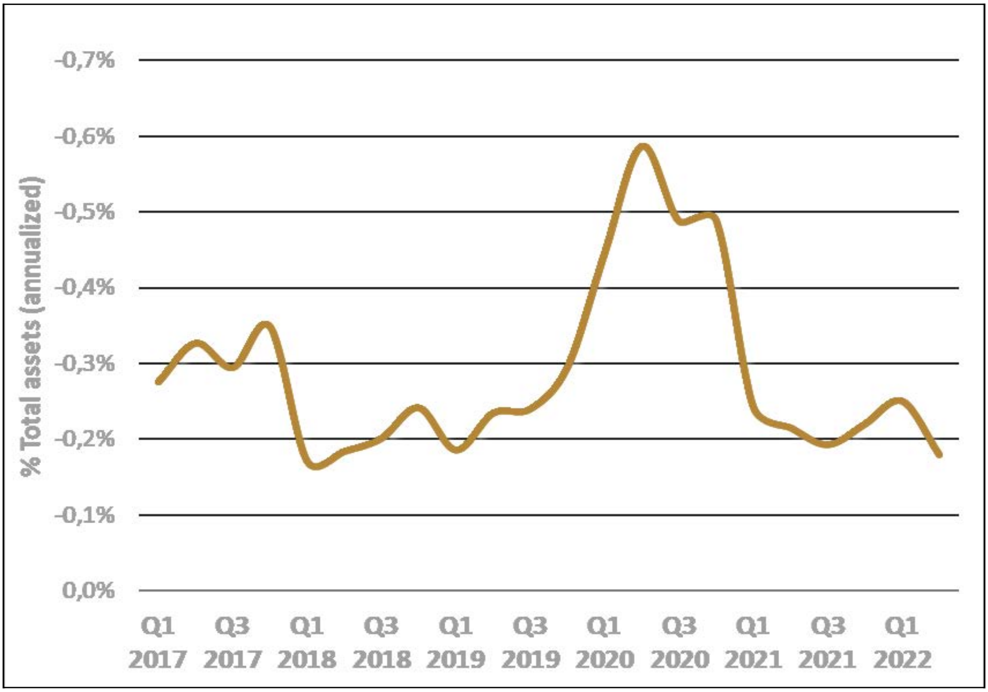
Recent developments show a pattern consistent with the development of economic activity described so far. During 2020, with the outbreak of the pandemic, European institutions made a significant effort in the accounting recognition of impairment and provision, anticipating a possible worsening of the credit quality of their assets which, in view of what happened, was not maintained during 2021.

In terms of results, this effort resulted in an increase in allowances due to amounts set aside for estimated loan losses during 2020 to 0.5% of total assets, compared to an average of approximately 0.3% in the previous three years, returning to previous levels in 2021 and 2022 (chart 24).

As regards NPL coverage levels, the ratio has remained stable at around 45% of impaired assets (chart 25), although it should be noted that this ratio is affected by differences in the level of collateral covering the assets and, foreseeably, by the scope of public guarantee schemes (PGS) granted by governments in response to the pandemic, making it difficult to draw conclusions from a mere comparison of the ratio.

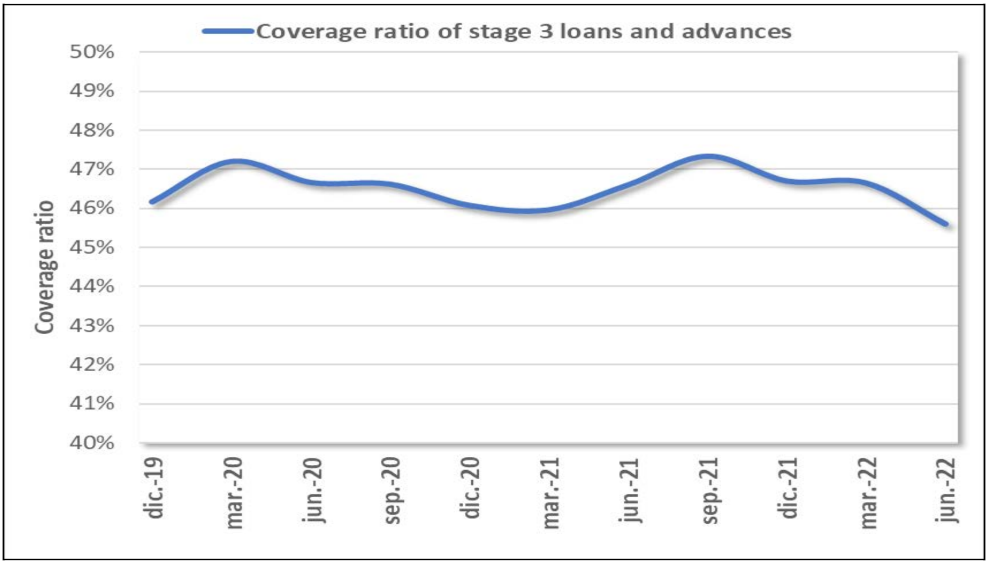
[25] It should be remembered that under the current regulatory framework, credit institutions must cover expected losses with provisions (charged to their income statement) and unexpected losses with capital.

Chart 24: Impairment and provisions.



ECB. Banking Supervisory Statistics. AEB estimates.

Chart 23: Coverage ratio NPLs.



Source: EBA Risk Dashboard.

4.4.4. PROCYCLICALITY OF BANKING REGULATION

One aspect that could become relevant in relation to the effects on banks' income statements of the potential [higher] delinquency rates referred to in the title of the article concerns the cyclicality of accounting standards.

This is a highly controversial issue which is beyond the scope of this paper, but nevertheless worth noting.

The accounting standard (IFRS 9), while noting the desirability of calculating expected losses taking into account future expectations and not only past experience, is in fact pro-cyclical in that it requires the reclassification of operations to stage 2 in the event of a significant increase in credit risk, which inevitably occurs in times of economic downturn, and, with the reclassification to stage 2, an increase in provisions: from the 12-month expected loss to the expected loss over the life of the operation.

Higher provisioning requirements, which weigh on banks' earnings and thus on their capital, have the effect of reducing their capacity to finance the economy, fuelling the contractionary cycle.

On the other hand, capital buffers, i.e. the margin of capital above the regulatory minimum required of banks, are designed to play this countercyclical role[26]. Specifically, the so-called countercyclical buffer would lead to the creation of excess capital which, released in contractionary phases, would allow banks to maintain the flow of credit without reducing their solvency and thus contribute to "flattening" the cycle.

But here, too, the constitution and, if necessary, the release of the buffer is a matter of some controversy. Few member states had the countercyclical buffer activated at the beginning of the pandemic and they released it; but there are no evident effects of this release. Currently very few states (none of the large ones) have the countercyclical buffer activated or plan to activate it before the end of 2022, while several have already anticipated its requirement in 2023, in varying amounts and with different criteria[27].

In sum, if there is already considerable uncertainty about future economic developments, it does not appear that bank accounting and prudential regulation would allow for a clear counter-cyclical effect on banks' performance.

4.5. SPANISH BANKS

Spanish banks show similar characteristics to those described for European banks in general, in terms of the composition and recent evolution of their balance sheets and results, the risks they face in the current situation and the strength with which they face uncertainty in the event of a possible worsening of the economic situation.

All this within the peculiarities of their business model, focused on retail commer-

[26] Fernández de Lis, S, Procyclical financial regulation: what can be done?, World Economic Forum, November 2020.

[27] https://www.esrb.europa.eu/national_policy/ccb/html/index.en.html

cial banking and geographically diversified. The retail commercial banking business means that net interest income plays a greater role in the profit and loss account, which is based on the greater weight on the balance sheet of customer loans and deposits and which, thanks to diversification, offers a high recurrence of results. Therefore, in principle, Spanish banks are better positioned to face the rise in interest rates than other business models more dependent on wholesale brokerage or on trading activity, which is more volatile and subject to market fluctuations.

However, it is a model that also bears higher structural costs; but in this respect, Spanish banks have one of the best efficiency ratios in the European banking systems, which allows them to have a greater margin to absorb, if necessary, any increase in operating expenses due to high inflation.

As regards NPLs, Spanish banks have also reduced them considerably—they are at their lowest level since the 2008 financial crisis. The ratio at consolidated level is consistent with their business model and they have a similar level of coverage to European banks in general.

With regard to activity in Spain, the NPL ratio is somewhat higher than the European average, but it is also at a minimum and there are several clearly differentiating elements with respect to the global financial crisis of 2008, three of which should be highlighted: (i) the macroeconomic outlook and the financial situation of the private sector are more favourable: economic growth slows down but remains positive, unemployment levels and housing prices remain resilient, and corporate and household debt have notably declined, which is reflected in a reduction of the weight of debt to 150% of GDP, below the European average; (ii) in corporate financing there are no sectoral concentrations and none of the sectors with the highest NPLs has a significant weight in the portfolios as a whole; moreover, companies, especially in the sectors most affected by the crisis, have benefited from support, including public guarantees covering more than 20% of the financing granted by credit institutions; and (iii) in addition to public aid aimed at maintaining household incomes, a wide range of measures have been deployed, both at the initiative of the government and of the institutions themselves, aimed at facilitating compliance with household financial obligations (moratoria, grace periods, extension of maturities, etc.) to avoid situations of mass default. In other words, the outlook for expected default in Spain is very different from the situation experienced in the 2008 crisis.

In short, Spanish banks start from a position of strength, with capital ratios consistent with the risks they assume, with a sufficient level of leeway over regulatory and supervisory requirements; they have shown their resilience in the periodic stress tests conducted by the EBA and the ECB[28]; they have a well-defined, diversified business

[28] The autumn 2022 Financial Stability Report of the Bank of Spain reflects the results of the exercises carried out by the Bank of Spain in this respect with similar results.

https://www.bde.es/f/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/22/IEF_Otono2022.pdf model that generates recurrent results and, finally, with solid governance and proven experience of their managers.

4.6. SOME ADDITIONAL THOUGHTS

One element that is likely to have a decisive impact on bank margins and NPLs in the coming quarters is related to the interaction between fiscal and monetary policies.

In the debate over whether monetary policy measures should be tight enough to curb inflation or not so tight as to put the economy at risk of recession, the IMF's view has been clear. Mindful of the possibility that financial markets may find it difficult to cope with an overly rapid pace of tightening, the IMF considers that the costs of taking on too loose a monetary policy and not tackling persistent inflation would put future macroeconomic stability at risk.

Since the IMF's own global inflation forecasts leave no room for doubt ("Global inflation is forecast to rise from 4.7 percent in 2021 to 8.8 percent in 2022 but to decline to 6.5 percent in 2023 and to 4.1 percent by 2024") and that growth forecasts are no more optimistic ("the weakest growth profile since 2001 except for the global financial crisis and the acute phase of the COVID-19 pandemic and reflects significant slowdowns for the largest economies") everything seems to indicate that higher interest rates than in previous years and tighter financial conditions for companies and households await us, which, if they materialise, would have counteracting effects on banking results: the expected improvements due to the normalisation of interest rates could be cancelled out by the reduction in financing volumes and, in particular, by the increase in non-performing loans.

This is where fiscal policy measures, more precisely the targeting of measures, become particularly relevant. Continuing with the IMF's reflections, "[f]iscal policy's priority is the protection of vulnerable groups through targeted near-term support to alleviate the burden of the cost-of-living crisis felt across the globe". Measures that, if properly targeted, will allow income levels to be maintained for those segments of the population with the least capacity for manoeuvre in recessionary situations, who are expected to be affected to a greater extent by the increase in unemployment and who have lower accumulated savings.

On a voluntary basis, banks might also contribute to these efforts by introducing measures to help vulnerable sectors face the impact of higher rates on their mortgages, such as those recently agreed in Spain. The greater or lesser success of all these measures will inevitably be reflected in credit institutions' default rates.

A third element of the equation, which also features in the IMF's latest World Economic Outlook, is the intensification of structural reforms to improve productivity and economic capacity, enabling economies to adapt to a more volatile environment and expand their productive capacity, investing in human capital, digitisation, green energy and diversification, and allowing them to face the next crisis from positions of greater resilience.

4.7. CONCLUSIONS

The starting position of European banks is reasonably good: they have high levels of capital, their balance sheets are healthy, their NPLs are low, coverage levels are adequate, profitability is returning to cover the cost of capital and their resilience has been tested in the stress tests conducted by the EBA and the ECB. With the reasonable exceptions when moving from aggregate analysis to individual one, but without supervisors having warned of the existence of significant outliers.

The normalisation of interest rates, i.e. the shift from very low or even negative rates to positive ones and a positive sloping curve, allows banks to perform their maturity transformation and risk dilution function. Therefore, higher rates can be reasonably expected to have positive effects on bank results dependent on typical intermediation activity, mainly net interest income.

However, this potentially beneficial effect of higher interest rates is neither automatic nor risk-free. Recent developments in the balance sheet structure of European banks show that most of their liabilities (demand deposits) are exposed to rate changes. A significant part of their assets (loans and debt securities) is at fixed rates and will take time to reflect the increase. Balances, both assets and liabilities, with central banks have reached a significant volume and their future interest rate relies on discretionary decisions by the monetary authority. In short, the effect on the net interest income of European banks in the coming quarters will depend on both the intensity and the speed with which the rise in interest rates is passed on to the different assets.

A scenario of rising interest rates, high inflation, economic contraction (eventually recession) and marked uncertainty is not the most favourable for the rest of banks' income statement margins. Debt instruments valued at fair value begin to show losses that institutions must record in the profit and loss account or in other comprehensive income; fees and commissions, generally linked to activity, are affected; operating expenses rise in all their lines and, finally, an increase in non-performing loans is to be expected.

With regard to NPLs, the starting situation is also reasonably positive, in the sense that the NPL ratio is at the lowest level since the global financial crisis, coverage levels have been maintained, the cost of credit is at acceptable levels and banks have arguably already absorbed, if not all, a large part of the impact of the pandemic in 2020.

The sectors most affected by the economic effects of the measures adopted to tackle the pandemic, which entailed serious restrictions on mobility, and then by the supply crisis, mainly fuel, as a result of the war in Ukraine, have higher levels of non-performing loans. However, the weight of these sectors in bank credit to non-financial corporations is not high and, unlike the real estate sector in the 2008 crisis, there is no significant concentration in any of these sectors. However, the significant slowdown in the leading economies that all forecasts point to, with the risk of an eventual recession in some cases, together with the effect of inflation and the increase in financial burdens derived from the rise in interest rates, could have a negative impact on the situation of some segments of companies and households and on their capacity to meet their financial obligations, with the consequent potential increase in credit default.

The intensity with which these hurdles materialise and the ability of banks to manage their NPL ratios and cope with higher provisioning needs will be decisive in assessing the extent of the recovery in margins as a result of the normalisation of interest rates.

On the other hand, regarding fiscal policy, both the recommendations of international organisations and the measures adopted by governments are aimed at providing selective aid, targeted at the economic sectors and segments of the population particularly affected, which will enable activity, employment and the income levels of companies and households to be maintained for the duration of the crisis. In addition, credit institutions are also implementing measures to make it easier for their borrowers to meet their financial obligations.

Hopefully, the combined effect of all these actions will help to contain delinquency and maintain the flow of credit to the economy at the quantity and quality necessary to overcome the crisis.

In short, against the gloomy clouds on the horizon, banks, on this occasion, represent an element of strength, resilience and security, committed with economic agents and authorities in the common desire to put the crisis behind us and return to a path of increasing production and employment, economic growth and sustainable development.

REFERENCES

Abad, J. and Suárez, J. (2017), "Assessing the cyclical implications of IFRS 9 - a recursive model", ESRB Occasional Paper Series 12.
https://www.esrb.europa.eu/pub/pdf/occasional/20170717_occasional_paper_12.en.pdf

Banco de España. Informe de Estabilidad Financiera. Otoño 2022
https://www.bde.es/f/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/22/IEF_Otono2022.pdf

Barnejee, R., Franceschi, F. and Riederer, S. (2022), "Borrower vulnerabilities, their distribution and credit losses", *BIS Quarterly Review*, September 2022.
https://www.bis.org/publ/qtrpdf/r_qt2209e.htm

BIS. Structural changes in banking after the crisis. Committee on the Global Financial System, CGFS Papers No 60, January 2018.
https://www.bis.org/publ/cgfs60.pdf

Detragiache, E., Tressel, T. and Turk-Ariss, R., Where Have All the Profits Gone? European Bank Profitability Over the Financial Cycle, IMF Working Paper, WP/18/99, April 2018.
https://www.imf.org/en/Publications/WP/Issues/2018/05/09/Where-Have-All-the-Profits-Gone-European-Bank-Profitability-Over-the-Financial-Cycle-45865

European Banking Authority. Risk assessment of the European banking system, December 2021.
https://www.eba.europa.eu/sites/default/documents/files/document_library/Risk%20Analysis%20and%20Data/EU%20Wide%20Transparency%20Exercise/2021/1025102/Risk_Assessment_Report_December_2021.pdf
European Banking Authority. Risk assessment of the European banking system, December 2022.
https://www.eba.europa.eu/sites/default/documents/files/document_library/Risk%20Analysis%20and%20Data/Risk%20Assessment%20Reports/2022/RAR/1045298/Risk%20Assessment%20Report%20December%202022.pdf
European Banking Authority, Risk Dashboard, Q4 2021.
European Banking Authority, Risk Dashboard, Q2 2022.
https://www.eba.europa.eu/risk-analysis-and-data/risk-dashboard
European Central Bank, Supervisory Banking Statistics, Fourth quarter 2021.
European Central Bank, Supervisory Banking Statistics, Second quarter 2022.
https://www.bankingsupervision.europa.eu/banking/statistics/html/index.en.html
European Central bank. Financial Stability Review. November 2022
https://www.ecb.europa.eu/pub/pdf/fsr/ecb.fsr202211~6383d08c21.en.pdf
Fernández de Lis, S., Procyclical financial regulation: what can be done? World Economic Forum, November 2020.
https://www.bbvaresearch.com/wp-content/uploads/2020/10/Santiago_Fernandez_de_Lis_Procyclical_financial_regulation_what_can_be_World_Economic_ForumWB.pdf
International Monetary Fund (2022). World economic outlook: countering the cost-of-living crisis. October 2022.
https://www.imf.org/en/Publications/WEO/Issues/2022/10/11/world-economic-:outlook-october-2022
International Monetary Fund (2022). Global Financial Stability Report. October 2022.
https://www.imf.org/en/Publications/GFSR/Issues/2022/10/11/global-financial-stability-report-october-2022

PART II.

ISSUES IN FISCAL POLICY

5. COMMISSION'S ORIENTATION FOR A REFORM OF THE EUROPEAN UNION FISCAL RULES

GILLES MOURRE[1]

ABSTRACT

The Communication by the EU Commission of 9 November 2022 sets out the main features of a reformed EU economic governance framework, in particular of reformed EU fiscal rules. This article focusses on the proposed reform of the EU fiscal rules, which is one key pillar of the economic governance framework. The article is structured as follows. A first section sets out the process leading to the Communication and the following steps toward the possible adoption of a reform. The next three sections emphasise the three main substantive dimensions of the reform: the ability of the new medium-term approach suggested by the Commission to increase national ownership within a Common EU framework; the simplification of the EU rules and their greater focus on fiscal risks; and the enhanced enforcement mechanisms meant to ensure effective delivery. By way of wrap-up, the last section compares the key features of the reformed rules proposed by the Commission with the current rules.

INTRODUCTION

The Communication by the EU Commission of 9 November 2022 (henceforth "the Communication") sets out the main features of a reformed EU economic governance

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framework, in particular of reformed EU fiscal rules. The higher debt-to-GDP and necessary financing for a digital and green, climate-neutral economy and ratios call for fiscal rules that both safeguard fiscal sustainability and allow for strategic investments.

EU fiscal rules are a key element of the framework, instituted by the Maastricht Treaty in 1991 and the Stability and Growth Pact in 1997. A common monetary policy and a common currency in the euro area requires a coordination of decentralised fiscal policies carried out by sovereign Member States to avoid the adverse spillovers across the area. An unsustainable fiscal policy in one or several Member States could result in an increase in interest rates in other Member States or, worse, a risk of contagion complicating the transmission of monetary policy and possibly threatening the common currency.

The article will focus on the proposed reform of the EU fiscal rules, which is one key pillar of the economic governance framework. The economic framework contains other important elements beside the EU fiscal rules, in particular the national fiscal frameworks supporting the implementation of the EU fiscal rules, the surveillance of macroeconomic imbalances (Macroeconomic Imbalances Procedure – MIP) and the surveillance framework of Member States in the euro area experiencing or threatened with serious difficulties with respect to their financial stability. Importantly, economic surveillance will continue to be pursued in an integrated approach through the annual economic surveillance cycle, called European Semester.

The article is structured as follows. A first section sets out the process leading to the orientations for reform published on 9 November and the following steps toward the possible adoption of a reform. The next three sections emphasise the three main substantive dimensions of the reform. The second session focuses on the ability of the new medium-term approach suggested by the Commission to increase national ownership within a Common EU framework. The third section highlights the simplification of the EU rules and their greater focus on fiscal risks. The fourth section describes the enhanced enforcement mechanisms meant to ensure effective delivery. By way of wrap-up, the last section compares the key features of the reformed rules proposed by the Commission with the current rules.

1. THE PROCESS

AN INCLUSIVE CONSULTATION PROCESS LEADING TO ORIENTATIONS FOR REFORMS

The review of the fiscal surveillance framework noted its mixed success despite the intended improvements. The February 2020 Communication on the Economic Governance Review provided a mixed picture, which included the growing heterogeneity of fiscal positions across Member States (European Commission, 2019, 2020a and 2020b). The EU's economic governance framework has evolved over time and its successive reforms have generally been made in response to weaknesses in the framework that have been revealed with concrete implementation, specifically during economic crises. In particular, the legislative packages known as the *six-pack* and *two-pack* reflected the lessons of the global financial crisis and the euro area sovereign debt crisis. The legislative packages renew fiscal surveillance, reinforced national fiscal frameworks, strengthened budgetary coordination in the euro area and extending the scope of economic surveillance to macro-economic imbalances. The framework has filled surveillance gaps and become 'smarter' and more adaptable to economic conditions. At the same time, its concrete implementation has resulted in its complexification and not all instruments and procedures have stood the test of time.

The challenges facing the current EU fiscal framework could be summarised in five main points. First, the current rules has become complex with many sub-rules and indicators (structural balance, net expenditure growth, debt benchmark), often based on unobserved variables. This has undermined transparency and predictability. Second, they lack national ownership, since they do not allow for sufficient differentiation across Member States with regards to their fiscal space. The required adjustment is often perceived as fairly mechanical and 'imposed centrally by the EU'. Third, they provide limited incentives for reforms and investments. Fourth, despite a countercyclical design in principle, they operate in a pro-cyclical manner in practice, since not applied in good times to rebuild buffer and too contractionary in bad times. Lastly, their enforcement record is very uneven with almost half of the Member States that never met a prudent fiscal position (as defined by their Medium Term Fiscal Objectives). The corrective arm (Excessive Deficit Procedures –EDP) was never opened on the basis of a breach of the debt criterion, although this was one of the main innovations of the last reform of EU fiscal rules in 2011. The reason for not opening debt-based EDP eventually was the unrealistic pace and procyclical nature of the debt rule, consisting in reducing debt in excess of 60% by one twentieth on average per year.

In October 2021, the Commission relaunched the public debate on the review of the EU's economic governance framework, inviting other EU institutions and all key stakeholders to participate and engage. This resumed an important public debate, which had unfortunately been put on hold in March 2020 due to the outbreak of COVID in Europe. Various fora and a wide range of participants, including EU citizens via an online platform, have engaged in the public consultation and debated how current and future economic challenges demand reforms of the EU economic governance framework[2]. Multiple discussions with Member States took place in the context of the Council (ECOFIN), the Eurogroup and their committees. The outcome of these discussions was summarised by the Commission in a Communication published on 2 March 2022 (European Commission, 2022a). The outcome of the online public consultation for citizens and civil society bodies was presented by the Commission on 28 March (European Commission, 2022b).

[2] These fora and outreach endeavours covered various dedicated meetings, workshops and the online survey for citizens and civil society bodies. The participants to the debate included national governments, parliaments, social partners, academia and other EU institutions, not least the European Parliament.

Going beyond the strict remit of EU fiscal rules, the Communication recalls the need for an effective economic governance framework at large. It is meant to integrate the dimensions related to fiscal policy, structural reforms and public investments. The Communication presents not only the broad elements of the Commission's reform orientations but also provides additional details on practical aspects of the proposed reform of fiscal and macroeconomic surveillance. Four elements are stressed in the Communication in addition to the EU fiscal rules: national fiscal frameworks, the Macroeconomic Imbalances Procedure (MIP), post-programme surveillance and enhanced surveillance and the annual cycle of integrated surveillance usually referred to as the European semester.[3]

The suggested reform remains targeted and proportional to its main aim. It is important to note that the reform aims at improving *economic and fiscal* governance. This covers the objective of *economic stability*, which is a crucial framework condition for growth and investments while being an essential common public good for Member States and citizens. As such, this focuses on macroeconomic policies, not all EU objectives and policies. Moreover, this reform should be achieved without changing the Treaty and the institutional balance of power. In short, while encompassing, this reform should not be misconstrued as an overhaul of all EU policies and should remain compatible with the current decision-making and institutional framework of the EU.

MOVING TOWARD A REFORM VIA CONSENSUS

A thorough reform of the EU economic governance framework requires legislative changes. Amending the underlying legislation would allow for clarification and simplification of the framework. It would provide a high degree of legal certainty for the operation of a reformed framework, with the necessary involvement of the Council and the European Parliament. Agreeing on necessary legislative changes would follow the ordinary legislative procedure on most aspects, involving the Council and the European Parliament on an equal footing.

Swift agreement on revising the EU fiscal rules is a pressing priority at the cur-

[3] First, national fiscal frameworks support the implementation of the EU fiscal rules, although their effectiveness varied markedly across Member States. Second, the surveillance of macroeconomic imbalances introduced following the Global Financial Crisis under the name of Macroeconomic Imbalances Procedure (MIP) was successful in raising awareness of broader risks to macroeconomic stability and in reducing current account deficits (and less successful in reducing persistent and large current account surpluses). Macroeconomic surveillance remained untested in preventing the accumulation of new vulnerabilities and risks and in fostering the adequate preventive policy action. Third, the economic governance review also comprised an assessment of post-programme surveillance and enhanced surveillance as flexible crisis resolution tools. Lastly and importantly, economic surveillance will continue to be pursued in an integrated approach, whereby surveillance tools complement each other, in the context of the European Semester. In this respect, all Member States would be required to address the priorities identified in country-specific recommendations (CSRs) issued by the EU.

rent critical juncture for the European economy. Member States and the Commission should reach a consensus on the reform of the economic governance framework ahead of Member States' budgetary processes for 2024. Sound and growth-friendly public finances that can respond to the prevailing challenges and the achievement of common EU priorities have become increasingly important in the face of recent crises. This would also reassure financial markets on the institutional robustness of the euro area, which in part rests on sustainable public finances and the avoidance of adverse spillovers across Member States. The operation of credible fiscal rules will also help the ECB reach its goals, particularly as it faces the challenge of delivering on its mandate, namely to maintain price stability while ensuring financial stability and avoiding financial fragmentation in the euro area.

On the basis of these orientations and after discussion with Member States, the Commission will consider tabling legislative proposals. It will provide guidance for fiscal policy for the period ahead in the first quarter of 2023. This guidance will facilitate the coordination of fiscal policies and the preparation of Member States' stability and convergence programmes for 2024 and beyond. The guidance will reflect the economic situation, the specific situation of each Member State and the orientations laid down in this Communication provided that a sufficient degree of convergence of views is achieved across Member States by that time. In spring 2023, guidance will materialise through CSRs.

THE DEBATE WAS ALSO INFLUENCED BY A PROLIFIC ECONOMIC LITERATURE IN THE FIELD

The flourishing literature on efficient fiscal rules highlights different aspects, not least the setting of the fiscal requirements.[4] A large number of papers stressed the need for a single operational indicator anchored on a medium-term debt target, as a means to simplify the rules and ensuring debt sustainability (e.g. Arnold et al., 2022; Bénassy-Quéré et al., 2018; European Fiscal Board, 2019 and 2021; Heinemann, 2018; Martin et al., 2021). The debt target or the speed of adjustment towards it could be country specific. Several papers argued for a model where the target was set by Member States themselves subject to some form of EU endorsement, as a necessary feature for ensuring national ownership (European Parliament, 2021; Kopits, 2018; Martin et al., 2021 and Wyplozs, 2019).[5] Several papers stress the role of Independent Fiscal Institutions in

[4] The following subsection is not meant to provide an exhaustive review of the literature, rather a few pointers on some relevant themes emerging from it. A detailed comprehensive review is provided in European Commission (2022c).

[5] An influential paper by Blanchard, Leandro and Zettelmeyer (2020) even propose doing away entirely with numerical fiscal rules and moving to surveillance based on "fiscal standards", seeking to prevent unsustainable debt trajectories by focussing fiscal surveillance on qualitative prescriptions that leave room for judgement. The paper also proposes that fiscal surveillance by the Commission would focus on a debt sustainability analysis,

helping determine the suitable fiscal trajectory or vetting the government debt anchor. It should be clarified that the literature considers the 'debt-to-GDP ratio' when referring to the term of 'debt'. Henceforth, both will be used interchangeably in this article. A 'debt increase' means public debt in monetary amount growing faster than GDP.

Most proposals in the literature prefer an expenditure rule as the single operational indicator (Arnold et al., 2022; Bénassy-Quéré et al., 2018; Martin et al., 2021; Mohl and Mourre, 2020). Simplification could also be achieved by streamlining exceptions to the rules (Kamps and Leiner-Killinger, 2022). Several papers highlighted the need to promote investments and reforms, but cautioned against the use of golden rules (European Fiscal Board, 2021; Heinemann, 2018; Martin et al., 2021). Bacchiocchi et al. (2011) highlighted the role of fiscal sustainability risks as a constraint on investment, rather than fiscal rules per se.

Implementation and enforcement challenges tend to be overlooked in the literature, although some important aspects were raised. Financial sanctions could be replaced with positive incentives (e.g. access to EU funds conditional on compliance with the EU fiscal rules), strengthened market discipline or increased political costs of non-compliance (respectively, Arnold et al., 2022 and Wyplosz, 2019; Kopits, 2018; Reuter, 2018). A control account could ensure better medium-term compliance by allowing governments to offset a deviation from their targets in one year with a deviation in the opposite direction in another year (Martin et al., 2021). Several contributions (Arnold et al., 2022; Bénassy-Quéré et al. 2018; European Fiscal Board, 2019 and 2021) highlighted the need to accompany fiscal rules with a centralised fiscal capacity. This last point is not covered in the Communication, given the lack of political consensus on the issue and the need to concentrate on the already very complex issue of re-designing the EU fiscal rules, while continuing to implement the Recovery and Resilience Facility, which could be seen as a temporary fiscal capacity.

2. ENHANCED OWNERSHIP WITHIN A COMMON EU FRAMEWORK: A MEDIUM-TERM APPROACH

The Treaty reference values - 3% of GDP for the budget deficit and 60% for the debt-to-GDP ratio - remain unchanged. These values are established in a Treaty Protocol and cannot be changed without unanimity. The focus of the suggested reform is to ensure that those values are upheld in a more effective manner. In particular, it should concentrate on a credible debt reduction path towards 60% of GDP and support sustainable and inclusive growth at the same time, thus "rediscovering the Maastricht spirit whereby stability and growth can only go hand in hand", as indicated by President Von der Leyen in her State of the Union address on 14 September 2022.

National medium-term fiscal-structural plans, embedded in a common EU framework, would be the centrepiece of the proposed revised fiscal framework. They would bring together the fiscal, reform and investment commitments of each Member State. In a nutshell, national medium-term fiscal-structural plans will contain a binding medium term expenditure path, a (possible) list of binding public investments and reforms justifying the extension of the adjustment period beyond the plan and the list of other investments and reforms covered by the European Semester process. These plans would streamline processes and deliverables and foster integrated surveillance, while acknowledging that incentivising structural reforms and public investments can have a positive long-term impact on fiscal sustainability ('via the denominator', by increasing output). The medium term expenditure path would ensure that the debt ratio is put on a downward trajectory or stays at prudent levels and the budget deficit is maintained below the 3% of GDP reference value over the medium term. All Member States would be requested in their plan to tackle the priorities identified in country-specific recommendations (CSRs) issued in the context of the European Semester.[6]

This medium-term approach would allow for differentiation between Member States. The Communication noted that "the existing EU framework requires all Member States to make similar adjustment efforts, in particular in the preventive arm, regardless of their debt position and fiscal risks. However, debt-to-GDP ratios and debt developments differ widely across Member States. Some of them have a very high debt exceeding 90% of GDP (and exceeding 150% of GDP in two cases). Others have a debt lower than 60% of GDP. Lastly, many are in an intermediate situation, with debt between 60% and 90% of GDP." Therefore, the fiscal-structural plan, setting out the fiscal adjustment path inter alia, will be discussed with the Commission. Country-specific circumstances and national priorities will therefore be taken into account. Member States will also have a lot of leeway regarding how they want to use their fiscal space, in particular in the case of low or moderate debt challenges. This model would strengthen national ownership.

At the same time, the fiscal-structural plan will respect a common EU framework, which will ensure transparency and equal treatment between Member States.

First, the assessment of plan and its fiscal path will be made against clear and transparent EU criteria. Member States should follow a common objective. The objective of debt sustainability is indeed the starting point for EU fiscal surveillance, as reflected the central objective underpinning the Economic and Monetary Union, which is to avoid so-called "gross errors" in the implementation of national fiscal policies, given their harmful spillovers to other Member States and to the euro area as a whole. Therefore, the Commission would put forward for Member States with a substantial or moderate public debt challenge, a reference multiannual adjustment path in terms of net pri-

[6] According to the Communication, "the medium-term plans should also put forward initiatives that are in line with strategic EU priorities derived directly from agreed EU guidance and targets that require policy action by Member States. Therefore, plans should also be consistent with the National Energy and Climate Plans (which are to be aligned with the targets of the EU Climate Law) as well as with the National Digital Decade Roadmaps. During the lifetime of the RRF, cross references to the RRPs would be needed to ensure policy consistency." Improving the quality of public finances and protecting public investments should be central elements of medium-term fiscal-structural plans, in light of the essential role of public investments and reforms in enhancing potential growth and addressing major systemic challenges such as the green and digital transition.

mary expenditure covering at least 4 years. The reference adjustment path would be anchored on debt sustainability. In other words, for Member States with substantial and moderate fiscal challenges (based on the risk classification of Commission's Debt Sustainability Analysis), this path - defined at the time of the elaboration of the plan - should ensure that, even in the absence of further fiscal measures, debt would remain on a plausibly downward path after the fiscal adjustment period and that the deficit would be maintained below the 3% of GDP threshold.

Second, on the basis of a positive assessment by the Commission, the Council would adopt the medium-term fiscal-structural plan, including its fiscal trajectory. This will further ensure that the plan fulfils a common framework and is discussed and adopted according to a multilateral approach, involving all Member States. The Commission would assess the plan against the revised common EU framework and could only provide a positive assessment of fiscal-structural plans if debt is put on a downward path or stays at prudent levels, and the budget deficit is maintained below the 3% of GDP reference value over the medium term. Pending a positive assessment by the Commission, the Council will endorse the plan or request the submission of a revised plan. This multilateral process would ensure transparency, accountability and equal treatment. This multilateral fiscal surveillance allowing more differentiation across Member States would facilitate the integration and acceptance of common EU requirements in domestic policy debates and then increase the ownership of the common framework.

The fiscal path contained in the plans – fixed for a minimum period of four years - would need to be translated in national budgets for the entire period of adjustment. Importantly, the plans would be binding on national budgets. The minimum adjustment period of four years could be lengthened to match the national legislature, if Member States so wish. The plan could be revised before its completion in case of objective circumstances rendering the implementation of the plan infeasible, but would have to undergo the same demanding validation process. As for the Recovery and Resilience Facility, a change of government would not be a reason per se to reopen the plan, but the new government could request its reopening. Frequent revisions would, however, undermine the credibility of the plans as an anchor for prudent fiscal policies.

Importantly, reflecting Member States' increased ownership, the adjustment period of 4 years to put debt on a declining path can be extended by up to 3 years to facilitate a set of major investments and reforms. These investments and reforms would help bring debt on a sustainable path and therefore could underpin a longer adjustment period and a more gradual annual adjustment path. This may be useful for Member States with substantial public debt challenges. The major investments and reforms will be subject to clear and transparent EU criteria. The set of investment and reform commitments should be growth enhancing and support fiscal sustainability. They should address common EU priorities and all or a significant subset of relevant CSRs, including where applicable, recommendations issued under the MIP. They should also be sufficiently detailed, frontloaded, time bound and verifiable. Lastly, they should make it sure that country-specific investment priorities can be addressed without leading to investment cuts elsewhere over the planning horizon.

Thus, the reformed rules will include well circumscribed incentives for concrete growth policy. The new rules will encourage Member States – especially those with substantial debt challenges - to commit to reforms and investments against a longer and more gradual fiscal adjustment path to place their debt onto a downward path. They will not condone the possibility to compensate the lack of fiscal prudence with easy promises for better growth outlook, which could then be easily abused and may be seen as a glaring loophole in the system. Given the difficulty to assess the actual impact on growth of structural reforms and public investments and its precise timeframe (medium term vs long term), the debt sustainability analysis would remain prudent in this respect and resist optimistic assumptions. Positive unexpected outcome would be taken into account since allowing for milder adjustment in the next plan after 4 years. As mentioned above, the new rules will also allow Member States with fiscal space (moderate or low debt challenges) to move away from too stringent fiscal discipline and spend more on investments and reforms.

National frameworks and processes would help meet the objectives of the medium-term structural-fiscal plan, strengthening national ownership. The Communication stated in this respect that "independent fiscal institutions would play an important role in each Member State in assessing the assumptions underlying the plans, providing an assessment on the adequacy of the plans with respect to debt sustainability and country-specific medium-term goals, and monitoring compliance with the plan. This would entail improving the set-up and performance of independent fiscal institutions. The outcome would be a greater debate at national level and thus a higher degree of political buy-in and ownership of the medium-term plan."

3. SIGNIFICANTLY SIMPLIFIED RULES FOCUSING ON FISCAL RISKS

A single operational indicator anchored on a sustainable debt trajectory would serve as a basis for setting the fiscal adjustment path and carrying out annual fiscal surveillance. This single indicator is the (nationally-financed) net primary expenditure, i.e. expenditure net of discretionary revenue measures and excluding interest expenditure as well as cyclical unemployment expenditure. Its use as the single operational indicator for surveillance would allow for the full operation of automatic stabilisers, including fluctuations of revenue and expenditure outside the direct control of the government. This would ensure a high degree of macroeconomic stabilisation. While Member States could use alternative indicators for national budgetary purposes (e.g. a structural balance), the annual fiscal surveillance would be conducted solely at the EU level using this single operational indicator. The agreed multiannual net primary expenditure path should be defined so as to ensure debt sustainability. In other words, it should ensure that the debt-to-GDP ratio is put or kept on a downward path at the latest by the end of the adjustment period or stays at prudent levels, while ensuring that the budget deficit is maintained below 3% of GDP over the medium term.

The path once agreed by the Council will remain fixed for a planning period of at least 4 years. The fiscal requirement will be clear from the outset (in terms of expenditure ceiling net of discretionary tax measures). Adherence to this net expenditure path will be easy to establish. The other sub-rules in the current rules would be dropped: the structural balance rule converging toward the Medium Term budgetary Objective (MTO), the 'matrix of requirement' establishing the annual pace of structural balance adjustment to the MTO and the current debt reduction benchmark ('1/20th rule'). One rule based on one indicator will characterise the new framework.

The fiscal path expressed in terms of a-cyclical expenditure will ensure the counter-cyclicality of fiscal policy in normal situations. While discretionary fiscal policy will be compatible with debt sustainability (and modulated in case of commitment to investments and reforms), fiscal stabilisation should be ensured by the automatic stabilisers embedded in the indicator itself. As recalled by the Communication, "strict adherence to the agreed multiannual net primary expenditure path would allow fiscal policy to be countercyclical, building fiscal buffers in good times and allowing for the necessary policy response in bad times". Indeed, by only including *a-cyclical* fiscal items, the single spending indicator would let the cyclical items fluctuate to the full (i.e. the automatic stabilisers): ceteris paribus, the headline budget balance will deteriorate in bad times and will improve in good times.

Robust escape clauses will still be needed to stabilise the economy in exceptional situations. The Communication also tackles the case of exceptional shocks, also using the experience of recent crises, not least Covid-19 outbreak: "for major shocks to the euro area or EU as a whole, a general escape clause would be maintained to deal with a severe economic downturn allowing for a temporary deviation from the fiscal path. In addition, an *exceptional circumstances clause* would allow for temporary deviations from the medium-term fiscal path in the case of exceptional circumstances outside the control of the government with a major impact on the public finances of an *individual* Member State. This would require that the overall size of the shock exceeds a 'normal' range (e.g., costs of natural disasters should be anticipated within bandwidths). The triggering and extension of general and country-specific clauses would require the consent of the Council."

The revised common surveillance framework would be based on fiscal risks. Indeed, fiscal policy will be differentiated by level of sustainability risks and then anchored to a (country-specific) sustainable debt dynamic in the medium run. The '1/20th rule' entails a too demanding and too frontloaded fiscal effort that risks harming growth and thereby debt sustainability, while being severely pro-cyclical and endangering macroeconomic stabilisation. Therefore, the Communication stresses the need to shift to a more *risk-based surveillance framework* that puts debt sustainability at its core and differentiates more between countries by taking into account their public debt challenges. First, the requirement will depend on the class of debt challenge: 'low', 'moderate' or 'substantial'. Second, the fiscal path – defined in net expenditure terms –should ensure ex ante that debt is mechanically (without change in policy) getting back to a downward trajectory in the 10-year period following the adjustment. The anchoring will be made according to the Commission's Debt Sustainability Analysis (DSA). This anchoring is ensured during the design of the plan (ex ante), not during its implementation (ex post), since the net expenditure path is fixed for at least four years according to the plan agreed by the Council.[7]

Concretely, the Commission will provide a reference adjustment path following a common debt sustainability approach. To determine the reference adjustment path ensuring the convergence of debt to prudent dynamics, the Commission would use a well-established and transparent methodology, based on its DSA framework, which was agreed with Member States. In a nutshell, following the expenditure path will guarantee ex ante that, after the adjustment period, the Member State moves from 'substantial' to 'moderate' debt challenge (or stays in the 'low' or 'moderate' challenge category). More specifically, for Member States with a substantial public debt challenge, the reference net expenditure path ensures that i) *by the horizon of the plan*, the debt trajectory for a 10-year period at unchanged policies is on a plausibly and continuously declining path; ii) deficit is maintained below the 3% of GDP reference value over the same 10-year period. For Member States with a moderate public debt challenge, the reference net expenditure path ensures that i) *at most 3 years after the horizon of the plan*, the debt trajectory for a 10-year period at unchanged policies is on a plausibly and continuously declining path; ii) *by the horizon of the plan*, deficit is maintained below the 3% of GDP reference value including the 10-year period referred to above. For Member States with a low public debt challenge, *at most 3 years after the horizon of the plan*, the deficit is maintained below the 3% of GDP reference value over a 10-year period. The plausibility of the downward path is defined with the use of stress tests.

4. STRONGER ENFORCEMENT MECHANISMS

Whilst more leeway would be given to Member States for the design of their fiscal trajectories, a more stringent enforcement at EU level would underpin multilateral sur-

[7] Concretely, anchoring an operational fiscal path to debt means tying up an operational indicator to a prudent dynamic of the future debt-to-deficit ratio. The operational indicator (i.e. net spending) needs to be both under the control of government and ensuring macroeconomic stabilisation thanks to its counter-cyclical operation. The path in primary deficits will be such that the *predicted* debt-to-GDP ratio – projection made at the time of the elaboration of the plan – would be put on a decreasing path after the fiscal adjustment period. This downward-sloping debt dynamic should be ensured in a robust fashion, not only in a central scenario (whose assumptions can always be debated) but also in a series of stress tests and also taking into account past macroeconomic shocks experienced by each Member State. This makes all the more sense because future debt dynamics can be - at least partly- predicted, since closely related to observable data (current debt-to-GDP ratio and the initial level of primary budgetary deficit as a % of GDP) and expected trends (projected costs of demographic ageing and interest-growth differential as captured by market expectations). Of course, debt-to-GDP ratio may evolve differently than predicted due to a host of unforeseeable developments (e.g. adverse business cycles increasing the primary deficit, less favourable interest-growth differential, stock-flow impact on debt level due to revaluation or the materialisation of contingent liabilities). However, this unpredictable component will be taken up when drafting the second plan after four years, which may possibly require further adjustment if the first plan does not turn out sufficient to deliver the desirable debt dynamic.

veillance. Careful monitoring and enforcement would be enhanced compared with the current framework.

To ensure transparency and facilitate the effective monitoring of the implementation of the medium-term fiscal-structural plans, Member States would submit annual progress reports. In addition to fiscal reporting, the implementation of reforms and investments covered by the medium-term plans would be detailed in these reports. They would be the basis for annual surveillance by the Commission and Council, including possible enforcement decisions. It should be highlighted that the fiscal path and the possible commitment to investments and reforms to make it more gradual over a longer adjustment period would be the binding and 'enforceable part' of the plan covered by the EU fiscal rules, while the other investments and reforms reported in the plan would be subject to the European Semester recommendations and its soft coordination approach (or to the MIP binding procedures where relevant).

Regarding enforcement, the excessive deficit procedure (EDP) would remain unchanged for breaches of the deficit reference value of 3% of GDP ('deficit-based EDP'). As stressed by the Communication, "it is a well-established element of EU fiscal surveillance that has been effective in influencing fiscal behaviour and is well understood by policy makers and the general public, given its simplicity."

Importantly, the EDP for breaches of the debt criterion (henceforth 'debt-based EDP') would be significantly strengthened to allow its credible activation but also abrogation. It would focus on departures from the agreed net expenditure path, which the Member State has committed itself to and was endorsed by the Council. In case of deviations from the net expenditure path and when debt-to-GDP ratio is above 60%, the Commission will systematically prepare a report – under article 126.3 – to assess the relevant factors, since the Treaty of the Functioning of the Union excludes automaticity. For Member States with a substantial public debt challenge, departures from the agreed fiscal path would by default lead to the opening of an EDP, to be endorsed by the Council, according to the procedures laid out in the Treaty (article 126). For Member States with a moderate public debt challenge, departures could lead to the opening of an EDP, if the assessment concludes on the existence of "gross errors". If an EDP is not opened, enforcement could be made under the preventive arm: recommendations with early warnings could be used by the Commission and the Council before the conditions for opening an EDP are fulfilled.

The Commission would use a notional control account for each Member State to keep track of cumulative deviations from the agreed expenditure path. This information tool would enhance the medium-term memory of the framework and avoid small deviations eventually adding up to large ones over time. Deviations of different direction could also offset each other.

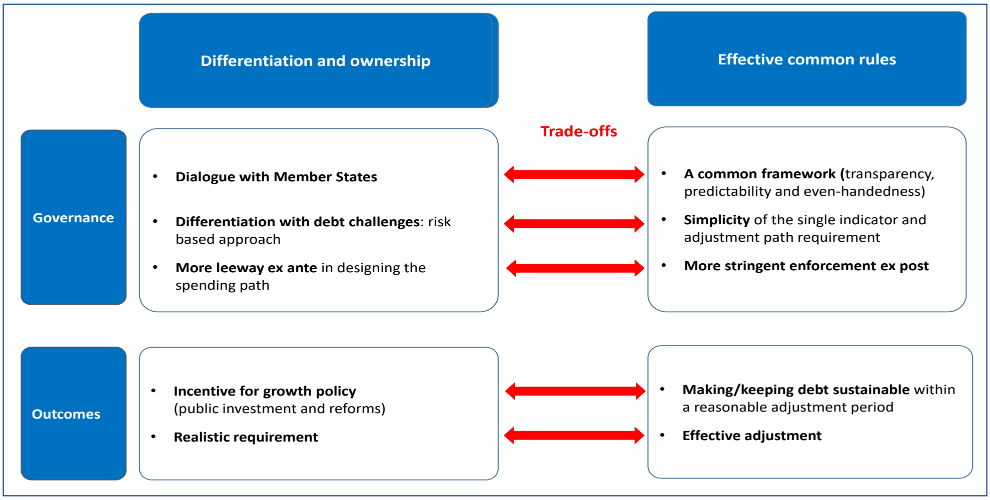
The range of sanctions would be broadened and enforcement mechanisms would be reinforced, for instance by adding reputational sanctions. "The effective use of *financial sanctions* would be de-constrained by lowering their amounts. *Reputational sanctions* would be enhanced. For example, Ministers of Member States in EDP could also be required to present in the European Parliament the measures to comply with the EDP recommendations. *Macroeconomic conditionality* exists for structural funds and for the RRF and would be applied in a similar spirit. EU financing could also be suspended when Member States have not taken effective action to correct their excessive deficit."

A new tool would be set up to enforce the implementation of reform and investment commitments made by Member States to benefit from a longer adjustment path. This tool would not be an EU financing instrument but rather an enforcement mechanism (with no money attached to it). Under the proposed reform, "Member States could request a more gradual adjustment path by putting forward a specific set of priority reforms and investments that foster long-term sustainable growth and, therefore, help improve debt dynamics. In case of non-implementation of those commitments, the new enforcement tool would lead to *a revision of the adjustment path towards a stricter path.* Due to the particular risk of negative spillovers within a monetary union, it would be possible to apply *financial sanctions for euro area countries* in case of non-implementation."

5. COMPARING THE SUGGESTED RULES WITH THE CURRENT ONE

The orientation by the Commission for a reform of the European Union fiscal rules tries to strike multiple delicate balances with a view to coming forward with a credible and enforceable framework. Graph 1 depicts the various elements behind the central balancing act between two main objectives: promoting national ownership with a *differentiated* approach, on the one hand, and designing effective *common* rules. Some trade-offs concern the governance aspects underlying the rules. If the right balance is struck in this regard, the right balance may emerge in terms of outcome: positive results will more likely be achieved, both in terms of fiscal discipline and growth-enhancing policy.

Graph 1. The balancing act to be achieved by suggested EU fiscal rules.



Source: author's elaboration.

On the governance side, the suggested reform proposed to embed the dialogue with Member States in a common framework. This first balancing act aims at reconciling a country-specific discussion with a multilateral approach, conducive to transparency, predictability and equal treatment. The latter means a similar treatment for a similar situation, not a uniform approach.

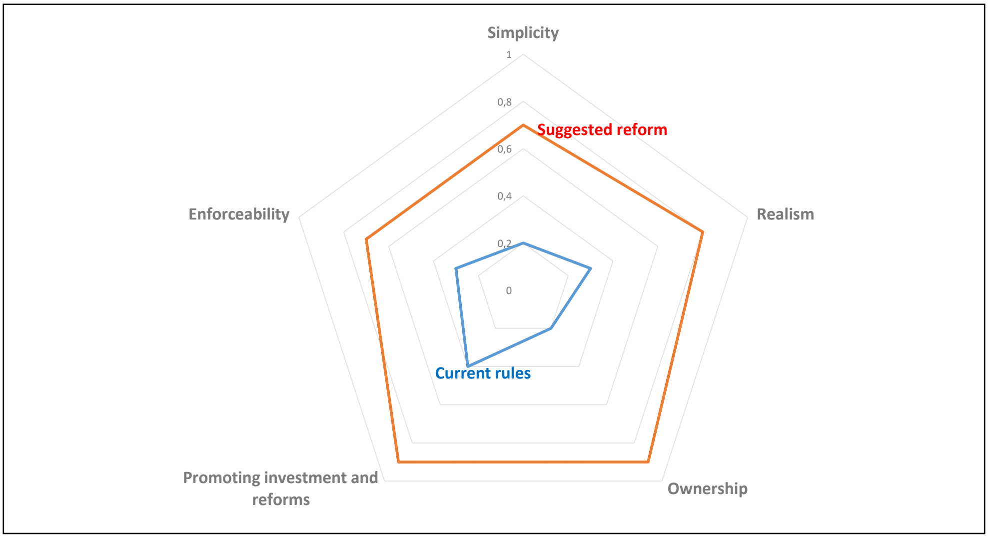
The second balancing act regards the need for a risk-based approach and the simplicity in the implementation. The risk-based approach differentiates according to the degree of debt challenges (or fiscal risks), which can be low, moderate or substantial. This is done ex ante when determining the relevant debt trajectory and then the minimum (net) spending path compatible with it. But to keep the implementation simple, this exercise of anchoring a spending path to prudent debt trajectory is only done once in four years (the duration of the plan), when setting the spending path in the plan. Once the plan is adopted, the spending path becomes the single fiscal requirement, i.e. the only norm with regards to which annual compliance is assessed. Another complementary element of simplification is the choice of a single operational indicator, namely the *a-cyclical* spending (i.e. primary expenditure net of discretionary measures and cyclical unemployment spending). It replaces the structural balance rule (i.e. need to reach the MTO), 'the matrix of requirements' prescribing the annual pace of adjustment, the expenditure benchmark and the '1/20th rule'. This indicator would allow existing taxes, cyclical unemployment expenditure and debt servicing to fluctuate freely according to the business cycle and various shocks, acting therefore as automatic fiscal stabilisers. The multi-annual plan (and the subsequent annual progress reports) will also replace the Stability and Convergence Programmes, submitted every year.

The third balancing act is to condition Member States' increased leeway in designing their fiscal requirement upon a more stringent enforcement ex post. This was described in detail in the previous section. The suggested rule does not exist (yet), so that their implementation record cannot be established yet. However, from the design of these rules, not least their enhanced transparency, simplicity and predictability, it can be reasonably assumed that deviating from the rules would be more costly in terms of reputation for Member States. The enforcement by the Commission and the correction of the deviations would also be facilitated because of much clearer criteria for opening debt-based EDPs, clearer abrogation criteria and less risk of long EDPs, less hefty financial sanctions and more subtle reputational sanctions. In short, the capacity of enforcing of the rules will be enhanced.

In terms of outcome, the suggested reform allows for taking into account the growth agenda and combining it with fiscal prudence. This replaces rigid numerical formula, which have a one-size-fits-all nature and are always arbitrary, while prescribing fiscal discipline without much consideration of the need for investments and reforms underpinning growth in the long term. First, a mechanical fiscal requirement can lead to too sharp adjustments, hampering growth in the short to medium term and being thereby counterproductive from a debt sustainability angle. Second, the suggested ownership-based system allows Member States with low or moderate public debt challenge to direct more financial resources to investments and reforms necessary for long term growth. All Member States, in particular those with substantial debt challenge, could request a longer adjustment period —involving a more gradual annual adjustment— in exchange for a credible commitment to investments and reforms. A dedicated enforcement tool would be created as a strong incentive for respecting this commitment.

This more growth-friendly path, determined by the Member State itself, would correspond to a more acceptable requirement, both economically and politically, which would increase its effectiveness in terms of concrete implementation. The current rules —in particular the '1/20th' rule— are maybe more demanding, but they are very difficult to implement on the ground, remaining more stringent only on paper. Realistic fiscal requirements are more prone to effective implementation. The requirements in the suggested revised system are more realistic since the fiscal path is proposed by the country itself. It can thus consider its own debt situation and its growth agenda altogether, with also the possibility to ask for a more gradual adjustment during an extended adjustment period. Moreover, the anchoring of the fiscal path to debt developments would be more powerful than an anchoring to a structural balance target. Indeed, putting high debt on a downward trajectory remains the ultimate objective of any fiscal rule and is a 'hard constraint' easy to grasp, hard to escape and with a strong medium term 'memory' (as opposed to annual targets easily forgettable).

Graph 2. Comparing the characteristics of the current and suggested new rules.



Source: author's elaboration.

Note: This is based on the author's assessment using the European Commission's detailed review of current rules (European Commission, 2019, 2020a and 2020b) and the recent Communication for the suggested new rules (European Commission, 2022d). It assumes that the reformed rules would be effective in promoting ownership and investments and reforms, while representing some simplification and offering more enforceability, given their more realistic nature, compared with the current framework. However, the exact scoring depicted here is only illustrative and would need to be confirmed on the basis of the future implementation record.

Based on the analysis of their design, the revised rules are likely to be superior to the current ones on many accounts, although only time will tell on enforcement. Graph 2 provides an indicative illustration on how the suggested rules fare regarding several key criteria. The question of how much they would improve the fiscal situation compared with the operation of the current rules is still a moot point in the absence of concrete implementation. As the 14th century British proverb says, 'the proof of the pudding is in the eating'. At the same time, the design of the new suggested rules will likely increase their simplicity, realistic nature, ownership, incentives for investments and reforms and, as discussed earlier, the capacity to enforce them. Thus, there are reasons for claiming that the red pentagon (figuring the characteristics of the suggested new rules) surrounds the blue one (figuring the characteristics of the current rules), even though evaluating the distance separating them remains an issue open for discussion. Another likely result would be that the increase in ownership and realism would be the most significant expected change compared with the current framework.

REFERENCES

Arnold, N.G., Balakrishnan R., Barkbu B., Davoodi H.R., Lagerborg A., Lam W.R., Medas P. A., Otten J., Rabier L., Roehler C., Shahmoradi A., Spector M., Weber S., Zettelmeyer J. (2022), "Reforming the EU Fiscal Framework: Strengthening the Fiscal Rules and Institutions", IMF Departmental Papers, 5 September.

Bacchiocchi, E., Borghi, E. and Missale, A. (2011), "Public Investment under fiscal constraints", Fiscal Studies, 32(1), 11–42.

Bénassy-Quéré, A., Brunnermeier, M., Enderlein, H., Farhi, E., Fuest, C., Gourinchas, P.O., Martin, P., Pisani-Ferry, J., Rey, H., Schnabel, I. and Véron, N. (2018), "Reconciling risk sharing with market discipline: A constructive approach to euro area reform", CEPR Policy Insight No 91.

Blanchard, O., Leandro, A. and Zettelmeyer, J. (2021), "Redesigning EU fiscal rules: from rules to standards", PIIE Working Paper 21-1.

European Commission (2019), "Fiscal outcomes in the EU in a rules-based framework – new evidence", Report on Public Finances in EMU 2018, Institutional Paper 095, pages 105-156.

European Commission (2020a), "Economic Governance Review", Communication from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions, COM(2020) 55 final.

European Commission (2020b), "Report on the application of Regulations (EU) No 1173/2011, 1174/2011, 1175/2011, 1176/2011, 1177/2011, 472/2013 and 473/2013 and Council Directive 2011/85/EU", Commission Staff Working Document, SWD(2020) 210 final.

European Commission (2021), "The EU economy after COVID-19: implications for economic governance", Communication to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions, COM(2021) 662 final.

European Commission (2022a), "Communication on Fiscal policy guidance for 2023", 2.3.2022 COM(2022) 85 final.

European Commission (2022b), "Online public consultation on the review of the EU economic governance framework. Summary of responses", 28.3.2022 SWD(2022) 104 final.

European Commission (2022c), "Future of the SGP - an overview of reform proposals", in Report on Public Finances in EMU 2021, chapter 3, part II, Institutional Paper 181. 12 July.

European Commission (2022d), "Communication on orientations for a reform of the EU economic governance framework", Communication to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions, COM(2022) 583 final.

European Fiscal Board (2019), "Assessment of EU fiscal rules with a focus on the six and two-pack legislation", August 2019.

European Fiscal Board (2021), "Annual Report 2021".

European Parliament (2021), "Resolution on the review of the macroeconomic legislative framework for a better impact on Europe's real economy and improved transparency of decision-making and democratic accountability", text adopted on 8 July 2021, P9-TA(2021)0358.

Heinemann, F. (2018), "How could the Stability and Growth Pact be simplified?", in-depth analysis requested by the European Parliament's ECON Committee, PE 614.501, April 2018.

Kamps, C. and Leiner-Killinger, N. (2019), "Taking stock of the functioning of the EU fiscal rules and options for reform", ECB Occasional Paper Series No 231, August 2019.

Kopits, G. (2018), "How could the Stability and Growth Pact be simplified?", in-depth analysis requested by the European Parliament's ECON Committee, PE 614.509, April 2018.

Martin, P., Pisani-Ferry, J. and Ragot, X. (2020), "Pour une refonte du cadre budgétaire européen", Notes du Conseil d'Analyse Économique, 2020/9 (No 63), pages 1-12.

Mohl, P. and G. Mourre (2020): " Performance of the EU spending rule: a quantitative assessment of sustainability, stabilisation and predictability", Paper presented at the joint conference of European Fiscal Board, Amsterdam Centre for Economic Studies and CEPR on Rethinking the European.

Fiscal Framework, 28 February 2020, Brussels.

Reuter, W.H. (2020), "Benefits and drawbacks of an "expenditure rule", as well as of a "golden rule", in the EU fiscal framework", study requested by the European Parliament's ECON Committee, PE 645.732, September 2020.

Von der Leyen, U. (2021), "State of the Union 2021", speech given by European Commission President von der Leyen to the European Parliament on 15 September 2021.

Wyplosz, C. (2019), "Fiscal Discipline in the Eurozone: Don't Fix It, Change It", ifo DICE Report, 17(02), pp.3-6.

6. A BACKWARD GLANCE AND FORWARD-LOOKING ASSESSMENT OF NEXTGENERATIONEU DEPLOYMENT IN SPAIN

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ABSTRACT

NextGenerationEU is a historical exercise in mutualising the region's debt in order to help the member states hit the hardest by the pandemic. Whether it succeeds or fails will determine European Union political and fiscal integration. The final outcome of the roll-out of the Facility in Spain may have a decisive say in the country's future and in the fate of European economic policy integration. So far, NextGenerationEU has left a bittersweet taste in Spain. Two years after its passage, the achievement implied by the early rollout of the Recovery, Transformation and Resilience Plan in Spain, the effective transfer by the European Commission of over €31 billion to the Spanish Treasury and compliance with the first reform milestones and investment targets has been somewhat marred by the delays in getting the funds to the real economy, doubts regarding the effectiveness and efficiency of some of the investments financed, and uncertainty and caution about the early reforms. The Recovery and Resilience Plan is a real opportunity to transform Spain, while contributing to European integration. Spain´s national plan is key to defining Europe' future next generations will experience. That is why it requires everyone's input. The revision of the Plan announced by the Spanish government in order to incorporate the €84 billion loan components creates an extraordinary opportunity to do just that.

6.1. INTRODUCTION TO THE RECOVERY AND RESILIENCE FACILITY: SPOTLIGHT ON SPAIN

A key characteristic of the Covid-19 pandemic was its worldwide impact. Inevitably, therefore, Europe has not been immune to the crisis which began as a health crisis and later morphed into a social and economic crisis, causing the European Union to step in with an extraordinary response of the magnitude warranted by the scale of the crisis.

Indeed, on 12 February 2021, the European Parliament and Council ratified Regulation 2021/241 establishing the Recovery and Resilience Facility[1], the centrepiece of the EU's response to the economic and social fallout from the pandemic, also known as the NextGenerationEU funds, with an endowment of over 800 billion euros. An historical exercise in mutualising the region's debt in order to help the member states hit the hardest by the pandemic, the success or failure of which will foreseeably determine whether or not the European Union continues to advance on its political and fiscal integration. The final outcome of the rollout of the Facility in Spain may have a decisive say in the country's future and in the fate of European economic policy integration.

Against that backdrop, the European Recovery Plan, widely known as Next Generation EU, is the cornerstone of Europe's response to Covid-19. It is important to acknowledge and underscore the fact that the European Union has proven up to the task, mobilising within just four months (between April and July 2020) a record volume of funds: almost 2 trillion euros between the Multiannual Financial Framework 2021-2027 and the European Recovery Plan[2]. With Euroscepticism on the rise in some member states, it is important to explicitly acknowledge the aplomb and diligence displayed by the European institutions in this respect.

More specifically, the goal the European Union set itself at the European Council meeting of June 2020, where it gave this historical response the go-ahead, was twofold: to facilitate the European economy's recovery from the impact of the pandemic; and to commit strategically to modernising the region's productive model by pushing for a more digital, sustainable, and industrial paradigm.

To that end, within the seven instruments articulating the Recovery Plan (which are often confused), the Recovery and Resilience Facility (also referred to as the Facility or RRF) stands out for three key reasons[3]: it accounts for 90% of the funds; it is accessed by each country via national recovery and resilience plans; and the money can only be used for two things: investments and reforms, all of which designed to accelerate the twin green and digital transition, framed by the country-specific recommendations made by the Commission to each member state under the framework of the European Semester. It must be recalled that the introduction of this performance-based instrument, as opposed to structural funds, is a big innovation in EU funding, as well as an improvement in national ownership of Investment and Reforms, as Recovery and Resilience Programs are proposed by Member States themselves.

It is likewise worth noting that as part of this initiative the European Union has

[1] https://eur-lex.europa.eu/legal-content/ES/ALL/?uri=CELEX:32021R0241
[2] https://www.consilium.europa.eu/media/45124/210720-euco-final-conclusions-es.pdf
[3] https://www.ceoexeuropa.es/marco-general-fondos-europeos/#plan-europeo-Recuperacion

deployed innovative measures, such as its maiden issue of green bonds[4], making the European Commission the biggest green bond issuer

On the national front, the main instrument defining the strategic orientation of the resulting fund execution commitment is the so-called Recovery, Transformation and Resilience Plan (the Plan) presented by the Spanish government to the European Commission in April 2021 and approved by the latter in June of that same year[5]. Note that Spain and Portugal were the first member states to pull together their plans and get them approved[6].

That Plan, which has garnered so much corporate interest and media coverage, is essential not only for collection of the funds but also for their execution as that document sets down the commitments Spain must uphold in order to receive, twice-yearly, the payments contemplated by Brussels up to the total of 69.5 billion euros of grants so far assigned to Spain until 2026.

The Council Implementing Decision[7], approved on 13 July 2021, on the approval of the assessment of the recovery and resilience plan for Spain, outlines in meticulous detail, as required under the MMF, the 110 investments and 102 structural reforms, encompassing a total of 415 milestones and targets, which the Kingdom of Spain, together with the Council and Commission, aim to attain thanks to the NextGenerationEU funds. The Spanish government must demonstrate to the Commission that is delivering on the promised milestones and targets every six months in order to receive the more than 69.5 billion euros of non-repayable transfers pre-allocated to the country.

Given the importance of the contents of the Plan in terms of defining Spanish economic policy until at least 2026, it is helpful to briefly overview the main commitments assumed.

Among the reforms committed to in exchange for the first payment tranche[8], it is worth highlighting the Organic Education Law, Royal Decree-Law 20/2020 of 29 May 2020, establishing the minimum income scheme, the decrees enacting remote working arrangements in the private and public sectors, Royal Decree-Law 23/2020, passing energy and other measures designed to reactivate the economy, Royal Decree-Law 5/2020, adopting urgent measures in the areas of agriculture and food, Law 8/2020 amending the original legislation containing measures designed to improve the food chain, Royal Decree 960/2020 (renewable energy economic regime), Royal Decree 1183/2020 (renewable energy grid connection), the Climate Change and Energy Transition Act, Royal Decree-Law 36/2020, on implementation of the Recovery, Transformation and

[4] https://ec.europa.eu/info/sites/default/files/about_the_european_commission/eu_budget/2021.1967_es_02.pdf

[5] https://planderecuperacion.gob.es/politicas-y-componentes

[6] https://ec.europa.eu/info/sites/default/files/com_322_1_es.pdf

[7] https://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:52021PC0322&from=EN

[8] https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/hacienda/Paginas/2022/271221-desembolso_recuperacion.aspx#:~:text=El%20ingreso%20de%20los%2010.000,forma%20de%20subvenciones%20del%20MRR

Resilience Plan, the modifications made in 2021 to personal income tax, wealth tax, corporate income tax and the new taxes introduced on certain digital services and on financial transactions and, lastly, Royal Decree-Law 14/2021 (6 July 2021) on urgent measures for reducing temporary employment in the public sector, all of which are currently in effect.

As for the second tranche, in terms of reforms (i.e., not considering the investment targets and milestones), Spain promised to make changes to the Workers Statute designed to drive a reduction in temporary employment by simplifying the spectrum of possible employment contracts, establish a regime for responding to cyclical and structural disturbances (a permanent furlough arrangement), improve the legislation governing collective bargaining and enhance the rights of those working for subcontractors. It also committed to protecting the purchasing power of public pension and sponsoring reforms designed to ensure effective retirement at the legal retirement age.

In relation with the third tranche it is worth noting the approval and entry into effect of the changes made to the Bankruptcy Act, legislation overhauling the vocational training system for modernisation purposes, the General Audio visual Communication Act, legislation targeting tax fraud, the revision of the taxes levied on vehicle registration and usage, reform of the fluoride gas tax, reforms to the social security contribution scheme for the self-employed and revision of the current complementary pension system.

And, ahead of the December 2022 delivery obligations in relation to the fourth release of funds, of up to 11.49 billion euros, Spain needs to be able to certify passage of the Housing Act, horizontal property legislation in order to facilitate the financing of refurbishment work, legislation reinforcing public policy effectiveness assessment, the reform of Law 7/1985 on local government regimes, the State Civil Service Act, legislation rendering court proceedings more effective, the Contaminated Waste and Soil Act, business creation and growth legislation, a start-ups act, a 5G cybersecurity act, a plan for restructuring and simplifying the state's non-contributory benefits system, the reform of Law 43/2006 in order to simplify and boost the effectiveness of the hiring incentive system in light of the recommendations made by AIReF and the amendment of Royal-Legislative Decree 8/2015 to reform regulation of non-contributory unemployment benefits.

And if that was not enough, by December 2022 Spain also needs to have approved the replacement of the pension sustainability factor with an intergenerational equity mechanism, updated projections showing that the pension reforms undertaken in 2021 and 2022 guarantee long-term budget sustainability and the increase in the maximum contribution base. The last three milestones alone, related with the sustainability of the public pension system, represent an extraordinary economic policy challenge in terms of bringing them to fruition. And there are more milestones slated for delivery beyond 2022, focused mainly on investment execution, where the regional governments have a leading role to play, whose attainment will determine the availability of the related funds and effectiveness of their management.

Chart 1: Distribution of disbursements, milestones and targets.

This ambitious reform thrust must be complemented by - in turn unlocking the release of funds to finance – a no less ambitious investment programme designed to boost the competitiveness and resilience of the Spanish economy by driving and prioritising energy and digital transition and transformation. In other words, release of the European funds is conditional upon attainment of the reform milestones as well as the investment targets.

Within the investments encompassed by the investment chapter titled ‘Urban and rural agenda, fight against depopulation and development of agriculture’, by December 2023 Spain must have at least 238,000 electric vehicles and subsidised charging stations, at least 200 kilometres of renovated commuter railroad, at least 23,000 home refurbishment interventions finished in at least 160,000 distinct homes, reducing their primary energy (accumulated) consumption by no less than 30%, and at least 5,000 farm holdings must have completed projects related with precision agriculture, energy efficiency, the circular economy and renewable energy usage, in this case by the second quarter of 2026.

In relation to ‘Resilient infrastructure and ecosystems’, by the second quarter of 2023 Spain needs to be able to certify the commissioning of water and wastewater treatment infrastructure sufficient to service at least 175,000 inhabitants, boosting efficiency.

Within the ‘Energy transition’ thrust, Spain must certify an increase in accumulated renewable energy generation capacity of at least 8,500 MW (adjudicated) and the creation of no fewer than two renewable hydrogen clusters for the financed sector integration plans by December 2023.

As for 'Modernisation and digitalisation of the industrial apparatus and SME universe, the recovery of tourism and making Spain and entrepreneurial nation', at least 800,000 SMEs must have received support via the Digital Toolkit initiative by December 2023, by which date 9,000 reference and public service centres (health centres, educational and training facilities, public R&D centres) must be operating at a speed of 1-Gigabyte and at least 125,000 connectivity vouchers must have been provided to individuals or households qualifying as 'vulnerable', along with another 11,000 connectivity vouchers for SMEs. And by December 2024, at least 3,000 businesses, of which no fewer than 2,500 SMEs, must have participated in and completed international expansion support projects.

Within 'Education and knowledge, continuous training and new skills development', Spain must have opened up 50,000 new vocational training places (relative to the year-end 2020 figure) by December 2022, a figure which must increase by another 135,000 by December 2024. And by December 2023, the country must certify the award of 2,600 scholarships and grants for post-doctorate students, assistant teachers, and researchers. Then, by December 2025, 2,600,000 citizens must have completed digital skills training and connected digital devices must have been provided to public or publicly financed centres to equip at least 240,000 classrooms, so closing the digital gap.

There is a host of other targets in the areas of 'Government modernisation', the 'Care economy', 'Bolstering of the culture and sports industries', and 'Modernisation of the tax system with inclusive and sustainable growth in mind' which should ensure unprecedented transformation. 112 investments of extraordinary reach which will make Spain a better country if successfully implemented.

To that end, as this is required in the Recovery and Resilience Regulation, a greater involvement in the consultation process when defining the original Spanish Recovery and Resilience Plan of relevant local and regional authorities, social partners, civil society organisations, and other relevant stakeholders, as well as national parliaments could have helped to strengthen real national ownership of the plan. A formal debate and endorsement of the plan by the Spanish Parliament – as was the case in Italy –could have been useful to secure deployment of programmed investments and reforms, especially those committed for coming years until 2026.

In a context of unprecedented Parliamentary fragmentation, when Spanish authorities have already identified challenges to fulfil several targets and milestones of its original plan, and in the final stages of a turbulent legislature, the European political and fiscal integration process depends considerably on how successfully the Recovery and Resilience Facility is implemented in countries such as Spain.

Spain has promised the European institutions to spearhead an ambitious set of investments and numerous reforms. Europe is taking an historical step in the integration of its economic policy, taking on debt until 2058, in order to drive Spain's transformation through to 2026. Spain has the opportunity to take a leap forward in its economic transformation if it is capable of building consensus around that thrust and executing the Plan efficiently and effectively. The addition of an addendum requesting up to 84 billion of loans plus over 10 billion euros of additional non-repayable that will increase NextGenerationeEU contribution up to around 14% of Spanish GDP (2019) and the potential amendment of the Plan announced by the government provides an extraordinary chance to build that consensus and contribute to this important European step forward.

6.2. REVIEW OF SPAIN'S RECOVERY, TRANSFORMATION AND RESILIENCE PLAN: REFORMS AND INVESTMENTS. THE STRATEGIC PROJECTS UP CLOSE.

Two years after its passage, the achievement implied by the very rollout of the Recovery, Transformation and Resilience Plan in Spain, the effective transfer by the European Commission of over 31 billion euros to the Spanish Treasury and delivery of the first reform milestones and investment targets committed to has been somewhat marred by the relative delays in getting the funds flowing to the real economy by comparison with the initial forecasts, doubts regarding the effectiveness and efficiency of some of the investments financed and uncertainty and caution about the early reforms as they are put to the test.

The progress made getting the Spanish Plan approved and attaining the initial milestones and targets contrasts with the slow actual adjudication of the funds and subsequent flow to the real economy, as well as limitations on the scope of the reforms and investments that are crystallising. Those caveats are dragging on the impact of the Facility in terms of delivering its core goals of stimulating the national economy and shoring up its competitiveness and resilience.

Application of the Regulation in mid-February 2021 prompted the formulation, presentation and approval of the respective national recovery and resilience plans, Spain being the first country to obtain that approval and, by extension, to receive the corresponding upfront financing. Then, delivery of the first 52 milestones and targets (essentially measures endorsed or conceived of before the pandemic) enabled Spain to be the first country to receive payment of the first tranche of funds. Attainment of the next 40 milestones and targets likewise made Spain the first recipient of the second tranche. As a result, since last August, Spain's governors have more than 31 billion euros, funded by mutualised European debt, with which to finance the investments contemplated in the Plan. If the third tranche, applied for in November, is released as expected, Spain will soon have received 37 billion euros.

6.2.1. OVERALL VISION

In relation to the investment chapter, one of the aspects of greatest concern to the European Commission when designing the funds was that the projects had to have a transformational impact, designed to drive, and accelerate the twin green and digital transition and build a more resilient productive model[9]. A goal on which Spain fell somewhat short in 2022.

Moreover, the idea of shoring up Europe's industry and strategic autonomy, which crystallised during the pandemic, took on greater importance when Russia invaded Ukraine. The perceived utility of the European funds was reinforced as a result, the idea being for the recipient countries to roll out projects that would reinforce their strategic capabilities, especially in the areas of manufacturing, energy, digital transformation, and food.

Execution of the strategic projects for economic recovery and transformation, known as PERTEs for their acronym in Spain, which were so well designed and conceived of at origin, have failed to deliver the expected results in 2022, particularly in sectors of great strategic importance for the Spanish economy such as the automotive industry.

Moreover, Spain has made an effort to develop a new model of governance and management of the funds, although there is still significant room for improvement in the full implementation of two important instruments: Royal Decree-Law 36/2020 enacting urgent measures for the modernisation of government and execution of the Recovery, Transformation and Resilience Plan and the Common European Funds Platform (CoFFEE).

On the reform front, Spain had the opportunity to tackle structural reforms with the potential to have a decisive impact on its economic and social model. One of the early debates was whether to earmark the extraordinary funds to the deployment and implementation of a select number of high-impact reforms with high transition costs or roll out a larger number of lower-impact measures.

The government went overwhelmingly for the second option, ruling out, for example, the possibility of earmarking some of the RRF funds to pushing through structural reforms needing accompaniment in the form of implementation cost funding, such as the 'individual labour capitalization account" fund, with an estimated cost of around 8.6 billion euros according to a Bank of Spain report based on 2013-2017 data. That reform was raised in 2011 as part of the social dialogue at the time and garnered wide Parliamentary support, the main obstacle being its high transition costs.

Far from embarking on an ambitious programme of reforms and investments aligned with the European Semester recommendations, the direction taken was to validate the ruling parties' electoral programmes, made to look Europe-friendly, thus facilitating rapid transfer of the funds to the member states and, by extension, to the real economy, regardless of whether driving genuine transformation thought European Council Country Specific Recommendations compliance as a result.

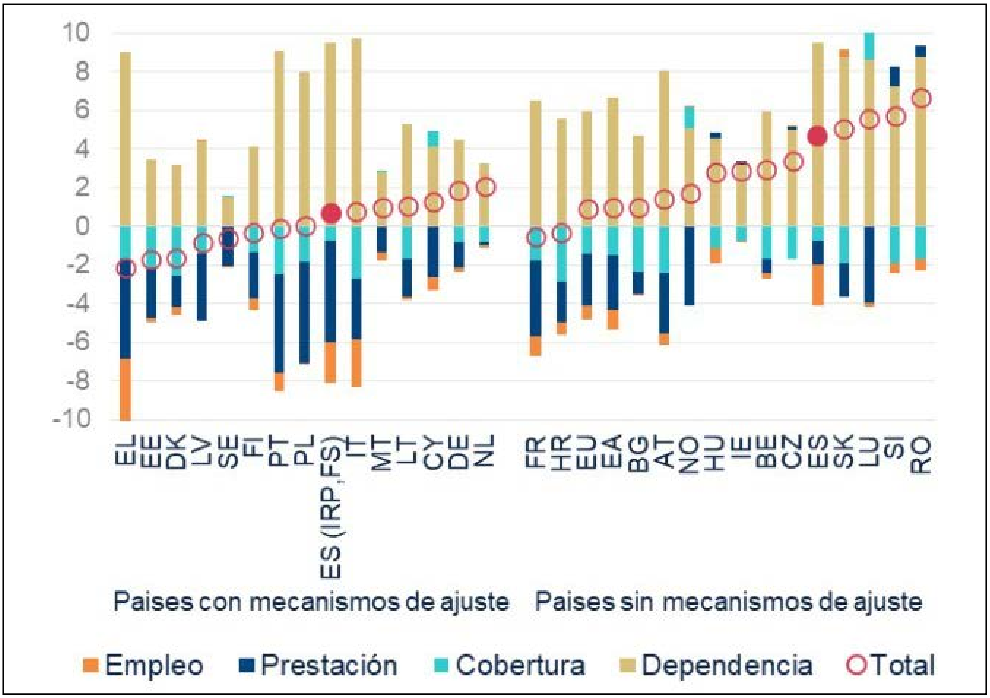
[9] https://www.ceoe.es/es/ceoe-news/union-europea/la-comision-europea-destaca-la-importancia-de-los-fondos-next-generation

6.2.2. REFORMS

Firstly, it is noteworthy that the European Commission approved the package of reforms presented by Spain for the first half of 2022, so triggering the release of the second tranche of grants (12 billion euros).

That means that during the two-month-long review, the Commission analysed and approved the 30 reform milestones committed to by Spain for the first half of 2022. Despite the European Commission's positive appraisal, it flagged doubts about the viability of some of the milestones, such as the first part of the pension system reforms, which does not render the system more sustainable and implies a significant increase in the social security contributions payable by employers and employees alike.

Chart 2: Increase in pension expenditure from 2019 to 2050, as a percentage of GDP.



Fuente: BBVA Research en base a Comisión Europea (2021) y Devesa y Doménech (2022).

On this point it is worth pointing out the recent study by Domenech[10], which finds that the pension reforms being pushed through under the umbrella of the NextGenerationEU platform, far from bolstering the sustainability of the Spanish public pension system, mean that Spain will increase its pension spending relative to GDP by at least three points by 2050 by comparison with the no-reform scenario, so abandoning the

[10] Europe | Pension schemes in the current demographic scenario: Spain and the EU | BBVA Research

club of countries with automatic sustainability guarantee systems. All while also increasing the tax burden on the labour factor by means of successive increases in social security contributions.

That second disbursement of funds had generated considerable uncertainty not only because it was the biggest in size but also because the milestones and targets on which it was conditional included certain high-profile reforms. In addition to the Riders Act, the Digital Rights Charter, approval of the Safe, Sustainable and Connected Mobility Strategy and the Offshore Wind Power Roadmap, the two milestones sparking the greatest interest were the labour reforms and part one of the above-mentioned pension system reforms.

In the end the Commission gave its positive preliminary assessment to the fulfilment of milestones and targets related to the second payment request submitted by the Kingdom of Spain on 30 April 2022. However, in the related report, the Commission's President, Ursula von der Leyen, expressed scepticism about one of the milestones, specifically #407, on preservation of the purchasing power of pensions and alignment of the effective and legal retirement ages.

Her scepticism referred to the fiscal sustainability of the pension system, specifically the impact of pension indexation to CPI, estimated at between 2.2 and 2.7 points of GDP by the Spanish government.

Although the European Commission endorsed the analysis submitted by the Spanish authorities, it opined that the estimates may be overly optimistic, proving more cautious in its analysis.

The working document in which the Commission analysed Spain's fulfilment of its milestones and targets signalled that "Spain has provided estimates that the measures increasing the effective retirement age yield savings ranging from of 0.2% to 0.4% of GDP by 2030 and 1.1% to 1.6% of GDP by 2050. The Commission services consider that the reform will generate fiscal savings but achieving savings up to and certainly above the lower bound is subject to very high uncertainty. It should be noted that the amendments to Articles 207 of Royal Legislative Decree 8/2015 referred to above can lead to lower penalties for involuntary early retirement. Furthermore, Article 1 of Law 21/2021 amending Article 205 of the Royal Legislative Decree 8/2015 introduces the possibility to reduce the retirement age for certain arduous and dangerous professions."[11].

At that time the Commission was not able to assess the full impact of the pension reform package as Spain still had to extend the pension calculation computation period, introduce the social security contribution reforms for the self-employed and increase the maximum contribution base. The government has until the end of 2022 to send the European Commission analysis of the fiscal impact of its pension reforms.

Beyond the complex reforms of the first half of the year, the government had to quickly to turn its attention to delivering the milestones promised for the second half of 2022 in order to qualify for release of the third tranche of funds.

Over the course of the second half, the government has to certify fulfilment of 29

[11] https://ec.europa.eu/info/sites/default/files/c_2022_4574_1_annexe_en.pdf

interventions (23 milestones and 6 targets) to gain access to the next tranche of grants (6 billion euros).

Within the plethora of commitments made to Brussels, reforms continue to gain prominence, including this time round improved access to the minimum income scheme, entry into effect of anti-tax fraud legislation, revision of the taxes levied on vehicle registrations and usage, revision of the existing pension top-up system and implementation of the so-called comprehensive vocational training system act.

6.2.3. INVESTMENTS

Spain's response in 2022 to the need to speed up project execution in order to accelerate the economic recovery and reconfigure its productive model to leave it greener, more digital, and more industrial was marked by four key aspects which, unfortunately, leave room for improvement.

6.2.3.1. Need to get the funds flowing faster to the real economy

The successful rollout of the initial reforms and investments has been marred by considerable weaknesses and threats that are curtailing the impact of the Facility and need to be rectified. The first is the delay in getting the funds flowing the real economy. Even though the Facility was intended as an economic stimulus plan in the wake of the pandemic, the reality is that nearly two years on from the Great Lockdown, the funds have yet to have barely any impact on Spain's real economy, as the transfer of funds across levels of government does not affect the latter until they reach the productive apparatus in the form of tender adjudications and aid for applicant businesses and individuals.

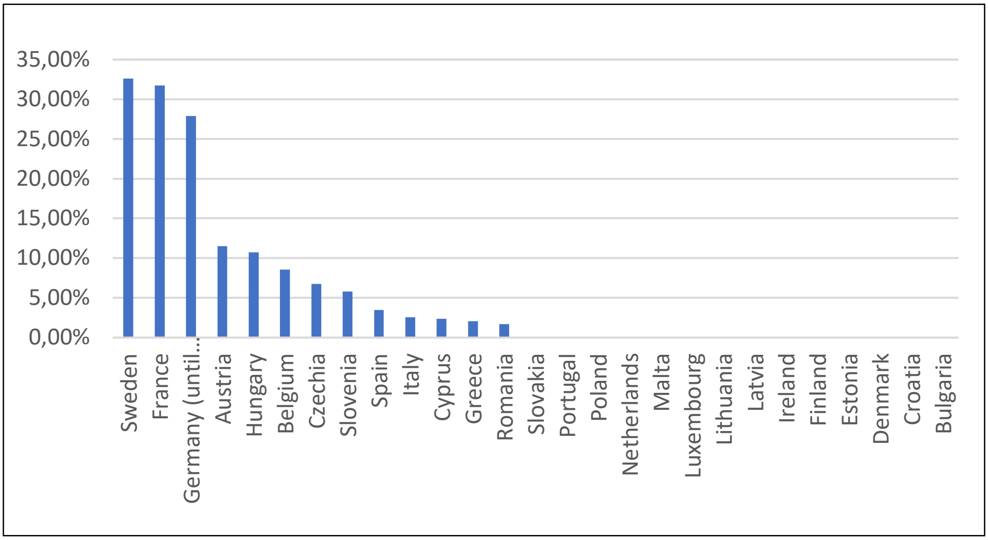
After nearly a year without the Spanish government (specifically the General State Controller, or IGAE for its acronym in Spanish) publishing data regarding the allocation of the funds budgeted for the Plan, the European Commission went ahead and published that figure for all member states as part of its technical assessment of the various Stability and Convergence Programmes[12].

According to this assessment, in the first year of the initiative (2021), Spain completed transfers charged to the Recovery and Resilience Facility equivalent to 0.2% of GDP, which is around 2.4 billion euros, compared to the initial official estimate that NextGenerationEU would contribute 2.5 points to GDP in 2021, having allocated nearly 25 billion euros in the budget. The RRF has therefore provided little stimulus for the economy a year and a half on from the onset of the pandemic. Other countries, such as France and Hungary (which had still not got their recovery plans up and running at the time) have made transfers against the RRF equivalent to 0.5% of their GDP, followed by Sweden, Slovenia, Greece, Germany and the Czech Republic, which like

[12] https://assets.ey.com/content/dam/ey-sites/ey-com/es_es/topics/newsletter-fondos-europeos/ey-insights-radar-17-julio-2022.pdf?download

Spain, have executed amounts equivalent to 0.2% of their GDP, with Romania, Italy, Belgium, Cyprus and Austria lagging at a 1% implementation rate and the rest of the EU member states stalled at 0%. Analysing the intensity of usage or implementation of the pre-allocated transfers, the levels reported by Sweden, France and Germany stand out: in the first year of implementation those countries had already implemented around 30% of the funds assigned to them, compared to 3.47% in Spain and 2.58% in Italy, countries with higher allocations due to the bigger relative impact of the pandemic on their economies.Indeed, the budget outturn data presented by the IGAE as of 30 September 2022[13] show that of the 28.72 billion euros of European funds budgeted for 2022, payments trailed at just 6.35 billion euros (22%). Moreover, of that sum, 2 billion euros (31%) had been transferred to the regional and local administrations to publish their calls for proposals and tenders, so that those funds have not necessarily reached the real economy.

Chart 3: Implementation of RRF grants 2021 as % of total pre-allocation.



Within that overall performance, it is interesting to analyse the use of the two specific instruments through which, under Spanish law, the public sector can channel funds to businesses: calls for funding proposals and public procurement tenders.

Before delving into the details, it should be noted that it is not possible to extract the updated, aggregate volume of funds awarded through calls for funding and tenders, i.e., the volume of funds that has reached the real economy, from the official information published by the government of Spain. That is, without question, a major

[13] https://www.igae.pap.hacienda.gob.es/sitios/igae/es-ES/Contabilidad/ContabilidadPublica/CPE/EjecucionPresupuestaria/Documents/EXTRACTO%2009-22.pdf

area for improvement in order to boost transparency and should be addressed by the authorities urgently.

As a result, the analysis provided next is based on the - detailed and recurring - data and estimates which some of the most important institutions compiled in 2022 in an effort to study and track implementation of the European funds - and with which the authors of this paper are proud to be closely associated – including EsadeEcPol and EY, through their NextGenEU Spain Observatory[14] and Spain's business employers' association, CEOE, through its European Projects Office[15].

An analysis of the calls for funding proposals, using the data collected real-time by a scraping bot which stores, processes, and analyses the results of all funding tenders associated with the RRF funds, developed by the above-mentioned EsadeEcPol-EY Observatory, reveals the following notable trends in 2022:

- As of 15 October 2022, 29.8 billion euros had been put out to tender, which is a more dynamic pace relative to procurement tenders, particularly during the first six months of 2022. As of that same date, 7.4 billion euros of grants had been adjudicated. What that suggests is that just one euro out of every four euros put out to tender was awarded, i.e., allocated to the real economy.
- The state government accounted for three-quarters of the calls for proposal, dominated by the Ministry of Industry and Tourism (6.92 billion euros), the Ministry of the Economy and Digital Transformation (4.56 billion euros) and the Ministry of Green Transition (4.02 billion euros). Digitalisation and matters related with energy and transport have therefore secured the highest volumes of funding so far.
- After the central government, the regional government of Valencia ranked as the public authority with the highest volume of calls, at 1.14 billion euros, followed by the Madrid government, at 1.03 billion euros, the Catalan administration, at 1.03 billion euros, and the regional government of Andalusia, at 713 million euros. Drilling down further again shows that the so-called Energy Foundation accounts for 60% of the money adjudicated in the regional of Madrid, with the equivalent Catalan body accounting for 20% of allocated funds in that region, highlighting the focus on energy in the current climate.
- In any event, the overall regional disparity appears high considering that the bulk of calls have been nationwide in scope.
- SMEs and individuals have received around half of the grants awarded (~13.1 billion euros). Large enterprises have garnered 10% (2.84 billion euros). Most of the funds, therefore, are going to the productive apparatus, and to small- and medium-sized enterprises in a ratio of 5 to 1. Some

[14] https://www.esade.edu/ecpol/es/temas-clave/observatorio-nextgeneu/

[15] https://www.ceoexeuropa.es/

8.4 billion euros have gone to entities with non-economic activities (foundations, non-profits, researchers, etc.).

- As for the use given to the total drawn against the various calls, the state government has allocated a large part of its funding to industry and energy (5 billion euros), followed by commerce, tourism, and SMEs (4.9 billion euros), with research and development in third place (3.8 billion euros). The regional and local governments have earmarked their funds mainly to industry and energy (a little over one billion euros) and job creation (946 million euros).
- The specific activities to which they've been earmarked are heterogeneous but consistent with the above trends. The largest call organised by the state government, associated with the electric vehicle strategic project, encompassed 2.95 billion euros. In second place, a range of guarantees, at 1.9 billion euros. Another 1.9 billion euros has gone to professional, scientific, and technical activities, leaving the so-called Digital Kit in fourth place.
- In concessions, 1 billion euros has gone to the implementation of low-emission areas in Spanish towns (which in turn require subsequent contract tenders for investment execution) and 703 million euros have gone to professional, scientific, and technical activities, mostly tendered by the state government. Not far behind, 673 million euros have been awarded to the education sector. The sectors associated with the various rounds of green mobility funding (Plan Moves I, II and III) have received 553 million euros. The next biggest recipients have been refurbishment and digital transformation.
- Madrid and Barcelona account for 2.46 billion euros of the total awarded by the central government to date. Seville and Valencia have received 787 million euros. In contrast, Castile & León (excluding the money absorbed by their capitals) has only received 141 million euros. Those outturn statistics suggest that although the beneficiaries are very heterogeneous, the regional distribution to date indicates a degree of concentration in the main cities.

Turning to the public procurement tenders, the key takeaways from 2022 are the following:

- Execution of those tenders has accelerated as 2022 has unfolded, starting very slowly, and picking up pace towards the end of the year. As of 28 February 2022, the tenders published stood at around 5 billion euros.
- In 2022, public law entities (public companies, in essence) were the most active in tendering, responsible for over 50% of all tenders, worth more than 2.7 billion euros, possibly evidencing a better ability to administer and manage public funds. The next most active body was the central government, adjudicating around half as many investments as the public law entities, followed by the regional governments, at just of 800 million eu-

ros. Lastly, the local authorities are playing a residual role in fund implementation to date, possibly because of the way in which the funds are trickling down from the state government to the other levels of government, a chain in which the local authorities are the last link.

- Within the public entities, the most active in 2022 was the rail infrastructure manager, Adif, which has tendered close to 2.5 billion euros, equivalent to around half of all European investment funds tendered to date. The tenders have been focused on the construction of infrastructure, as backed up by the data reported by the main firms picking up the contracts and the leading categories of goods and services tendered (under "ground transportation services" and "construction").
- The tenders adjudicated so far have taken roughly as long to process as similar tenders financed by other funds, suggesting that the administration has not really been fast in getting these funds moving. They have mainly gone to joint ventures and PLCs, mostly civil engineering firms.
- The tenders have been mainly allocated to infrastructure and building activities: 70% of the total has been earmarked to construction work.
- By region, Castile-La Mancha and Galicia top the ranking, having tendered over 200 million euros. The laggards are Catalonia, La Rioja, Melilla, and Navarre, each having mobilised less than 5 million euros. By ministry, the Ministry of Health accounts for over 70%.
- And lastly in terms of where the money is going, given that the location of the investments and the postal codes of the winning firms are itemised in the tender calls, we know that a lot of the investment has ended up near the capital, Madrid (around 10% of the tenders run in 2022 went to the capital: nearly 500 million euros of the nearly 5 billion tendered) and other provincial capitals. However, the speed with which some of the public authorities have reacted, particularly at the regional level, is drawing investments to other regions, spreading the money around.

6.2.3.2. Slippage in terms of the transformational impact of the projects

Secondly, the tender calls need to be worded and designed so as to ensure their intended transformational impact. Another area of improvement highlighted by the events 2022 is the need to organise tenders with a bigger innovative charge, in a departure from the tenders run in previous years with a charge against the governments' ordinary budgets.

The wide range of tenders set in motion in 2022 has been marked by excessive continuity, with too little room for funding for innovative or pioneering initiatives. One worth highlighting, however, is the Digital Kit, rolled out taking a novel approach to supporting SMEs with up to 49 employees and the self-employed (600 million euros, having been extended), eliminating red tape, providing financing for 100% of the associated costs, collaborating with the financial sector and other agents (notaries, etc.) and in two-way contact with business organisations.

Another of the tools set to usher in new tendering formulae are the strategic recovery and transformation plans, PERTEs for their acronym in Spanish, as detailed in the next chapter. However, although some of those plans include innovative tender calls, providing new opportunities for sectors that are key to Spain's economy (essentially the electric and connected vehicle plan, the renewable energy plan, the green hydrogen and energy storage plan and the new language economy plan), several of the tenders organised around these plans have been overly repetitive of past patterns: the so-called MOVES III mobility plan, the sustainable automotive technology plan, etc.

For example, implementation of the MOVES II plan, providing incentives for the purchase of electric vehicles (similar to that included in the electric and connected vehicle plan) has had an underwhelming impact. Specifically, according to a study by the Bank of Spain, that programme increased the percentage of new EV registrations in Asturias, Madrid, Navarre, the Balearics, and the Catalan provinces by less than one percentage point between its launch date and December 2020. In the remaining regions, however, it is possible that its impact was statistically nil[16].

6.2.3.3. Shortfall of flexibility, key to business participation in the tenders

Thirdly, the business community, regardless of company size or sector of provenance, has clamoured for layering flexibility into funding call design. It is important to remember that prior to the introduction of this extraordinary package of public aid, most of them had never participated in a public tender, their sole contact with the government being the payment of tax.

Against that backdrop, another area which was not sufficiently addressed in 2022 was the need to bring the public sector more in touch with reality of Spain's companies, particularly its SMEs and self-employed professionals, when designing the rules for participating in calls for funding and public procurement tenders. More specifically, the administration should have abandoned the inertia with which it operates all too frequently to come up with a different way of organising calls and tenders more in line with the needs of the productive apparatus.

And although the European playbook sometimes has very specific requirements when it comes to managing its funds which can pose considerable difficulties for the member states (e.g., in the area of state aid, recipient controls, etc.), Spain could have done more in 2022 to build flexibility into its fund implementation effort.

In fact, the excessive 'atomisation' of the calls ended up being one of the main impediments faced by companies looking to access the funds. That atomisation stems from the fact that a sizeable volume of the calls is organised for very specific purposes, so that a given company, if it aspires to secure an overall grant for a single project, may have to split that project up into a number of lines and go after each by means of a separate tender process.

[16] https://www.bde.es/f/webbde/SES/Secciones/Publicaciones/InformesBoletinesRevistas/ArticulosAnaliticos/22/T4/Fich/be2204-art28.pdf

That implies a double difficulty. Firstly, for the applicants, particularly SMEs and the self-employed, due to the complexity implicit in defining the various parts of a project and the need to participate in multiple aid application processes (which implies remaining abreast of when they are published, drawing up technical reports, etc.). But also, for the public sector, which has to organise and manage a higher volume of tenders and, thereby, administrative processes.

As a result, the way the Spanish government decided to design fund implementation has highlighted the need to organise tenders with broader scope in order to facilitate business participation and save time and work for both the applicants and the public authorities themselves. All of which, naturally, respecting the framework for the distribution of powers among the various levels of government enshrined in the Spanish constitution.

In a similar vein, the long-desired administrative agility - reduced red tape, elimination of bottlenecks - has not materialised to the extent hoped by both the public sector and the business community at the start of fund implementation. In fact, as already noted, the length time taken to call and adjudicate most of the tenders has been similar to that taken to organise tenders funded from the ordinary budget.

Once again, the Digital Kit has struck a different note, showcasing great initiative in terms of administrative flexibility and agility: thanks to an effort to robotise databases and enable interoperability between the various levels of government and other agents, applicants' red tape has been slashed, greatly boosting participation.

Here it is worth pausing to take stock of the main instrument implemented by the government precisely to ensure faster fund implementation and less red tape, milestone #157 of the Plan: Royal Decree-Law 36/2020 (of 30 November 2020), enacting urgent measures for the modernisation of government and execution of the Recovery, Transformation and Resilience Plan.

Despite the promise embodied by that piece of legislation, the slippage in fund implementation in 2022 suggests that, unfortunately, the instrument has fallen short of the mark. Essentially because its initial ambitions were not transposed into its wording, leaving certain matters pending legislation, and because its passage as a draft bill, at the decision of the house representative, has created a stalemate that has lasted over two years and led to 70 extensions of the deadline for presenting amendments[17]. Those impediments have prevented reinforcement of the text in order to make it a tool that can genuinely help speed up administrative proceedings and facilitate project rollout.

All of which prompts another question, namely whether the European Commission should not undertake a more exhaustive assessment of the Plan's milestones and targets, as milestone #157 surely cannot be deemed fully met so long as the situation described above continues.

[17] https://www.congreso.es/webpublica/ficherosportal/cuadro_plazo_enmiendas_XIV.pdf

6.2.3.4. One of the main pieces of unfinished business: full information and governance

Lastly, the fourth clear area for improvement in light of fund implementation in 2022 is related with the need to provide clearer information and better coordinate and govern the deployment of the funds. And that is important not only because of the huge volume of public funds coming from the European Union but also because transparency and governance are part of Spain's deliverables under the Plan.

More specifically, two aspects are of greatest interest in this respect. Firstly, as already noted, the shortage of official information regarding the amount of funds reaching the real economy. Here it is worth highlighting the fact that the last updated report published by the state controller dates to August 2021.

Elsewhere, and part of Plan milestone #173, the Spanish Ministry of Finance and Civil Service pledged that it would enable a platform for the control and management of the European funds by all levels of government by the third quarter of 2021. According to several regions, by December 30th, 2022, this platform was still not fully operational

Lastly, within governance, fund implementation would have benefitted from better coordination between the various levels of government and, most particularly, greater speediness on the part of the government in getting the funds to the regional and local authorities.

6.2.4. THE GOVERNMENT-APPROVED STRATEGIC PROJECTS FOR ECONOMIC RECOVERY AND TRANSFORMATION: PERTES

The strategic projects for economic and recovery, PERTEs for their acronym in Spanish, are one of the biggest novelties derived from the NextGenerationEU package in Spain and one of the instruments destined to have the biggest impact on compliance with the targets the funds were created for.

The government should be praised for how it conceived of this tool, which has had positive effects since its initial presentation, getting companies to network together and facilitating the generation of synergies between the various value chains and sectors.

Ever since the Plan's origins, therefore, those projects have garnered considerable interest, providing a new tool for public-private collaboration in Spain, which, inspired by the European Projects of Common Interest (PCIs), seeks to favour investment and development in strategic sectors.

At this juncture it is worth recalling the six criteria that define a PERTE under Royal Decree-Law 36/2020[18], which created and regulates this tool:

- Contribution to the creation of wealth, employment, and knock-on effects.
- Generation of a combination of know-how and support for industry as a binomial for spawning solutions for major challenges or market deficiencies.

[18] https://www.boe.es/diario_boe/txt.php?id=BOE-A-2020-17340

- Proposals with a significant R&D&i component.
- Sufficient project scale in qualitative and/or quantitative terms.
- Spill over effects for the SME ecosystem and stimulation of collaborative spaces.
- Alignment with the national recovery and resilience plan and the goals set at the European level.

Since the Cabinet passed the first such plan in December 2021, a total of 11 strategic projects have been approved, endowed with over 30 billion euros of public investments. However, although the original idea and design were highly innovative, generating excessive expectations, slow implementation of the related investments in 2022, mainly due to government delays and missteps in publishing the tenders, has diminished the initial force and potential of this tool.

Despite the excitement generated by the projects, their implementation in 2022 yields a few noteworthy conclusions.

- In terms of progress actually made, besides the electric and connected vehicle and the renewable energy, hydrogen and storage plans, little progress has been made on publishing the tenders for the other strategic projects. According to the latest official figures published by the Spanish government in June, just 6.65 billion euros of investments out of a total of 33.12 billion euros of the public funding allocated to the PERTEs (i.e., 20% of the total budget) have been put out to call or adjudicated. Indeed, there have been no calls at all in several plans (circular economy, microelectronics), and in many others, the implementation levels are very low (new language economy and care economy).

  Note, additionally, that the above figures do not imply actual implementation as the mere publication of calls for proposals does not mean the money has reached its potential beneficiaries.
- Inconsistencies in the calls with respect to the scope of the joint and several liability. Joint and several liability allows each member of a project to contribute based on its allocation of the total cost financed in order to guarantee the payments and project continuity (Ministry of Science and Innovation Order CIN/1502/2021[19]).

  This feature differs from one project to another. In the electric and connected vehicle project, for example, that joint and several liability applies to the universe of activities to be performed by the grouping, including its reporting obligations, loan repayment and servicing obligations and other liabilities for infractions. That is prejudicial for all members of the consortium, especially the SMEs, as the grants have to be guaranteed almost in full (not so the loans), and the failure of one member to pay its loan instalments has a direct impact on the other members of the grouping. Note that the definitive resolution published in November showed that

[19] https://www.boe.es/buscar/doc.php?id=BOE-A-2021-21967

there were no qualifying bids for 2.1 billion euros of this call, with only around 800 million euros adjudicated20.

- Difficulties faced by the SMEs in securing guarantees. For SMEs the requirement to provide an upfront guarantee is often an insurmountable or highly dissuasive impediment. The guarantee-negotiation process is very arduous and can often require, following the risk analysis stage, having to 'pledge' between 25% and 50% and the amount guaranteed.
  In most cases the recipient firm has to provide that amount upfront in order to secure the guarantee and/or deduct it from the initial funds collected, reducing the amount of aid received and increasing the financial burden involved in completing the activities contemplated in the project.
- Scant involvement by the banks in the public-private collaboration needed to implement the PERTEs so that the former can facilitate the applicants' guarantee and/or certification procedures in key project lines.
- Most of the deadlines for presenting applications are considered very tight, having on occasion been less than 60 days from official announcement of the calls. The application process creates difficulties for the SMEs as many require more than two partners per fundable grouping/project and bringing those partners in can imply a significant administrative burden and drain on resources.
- Some specific tender requirements are considered overly stringent from the technical standpoint, such as the requirement that collaborating SMEs develop the technology used, ruling out the possibility of participating as end user. In the 5G plan, Telefónica has many clients that do not develop technology but do want to implement it. The calls need to be disruptive, but the level of R&D required should be nuanced to ensure applicability to the companies comprising the real economic fabric, i.e., low levels of disruption designed to stimulate business transformation.

6.3. LESSONS LEARNED AND IDEAS FOR DOING THINGS BETTER

Implementation of the European RRF funds began in 2020 and is due to be completed by the end of 2026, making now a good time to introduce improvements designed to effectively maximise and accelerate their impact in Spain.

Following the important strides implied by the initial rollout of the Spanish Plan, there is still time to reinforce that initial impetus, correct the defects and amplify the positive aspects detected after this first year of implementation of the RRF in order to drive transformation of the economy while contributing to the European political and fiscal integration process.

[20] https://www.mincotur.gob.es/es-es/gabineteprensa/notasprensa/2022/documents/20221021%20np%20resoluci%c3%b3n%20definitiva%20perte%20vec%20final.pdf

The revision of the Plan announced by the Spanish government in order to incorporate 84 billion euros of loans not applied for in the original version and the additionally allocated grants creates an extraordinary opportunity to do just that.

In addition to updating and expanding the Plan to prioritise and reinforce the initiatives oriented around reducing the country's energy dependence and driving supply side reforms to help mitigate the impact of the shock caused by Russia's invasion of Ukraine, as expounded in an article here[21], there is still time to breathe new life into the Recovery, Transformation and Resilience Plan:

1. **Reinforcing political, social, and territorial consensus** around the Plan's definition, implementation, and oversight.
2. **Making the promised reforms more ambitious** and **aligning them with the European Semester CSRs**, avoiding putting forward critical ones
3. Reinforcing **dialogue and shared responsibility mechanisms between the various levels of government**.
4. Maximising the **use of tax incentives** as a means for channelling the investments, as is being done by several European peers, including France, Italy, Portugal, Sweden, Austria, and Denmark.
5. Adding **region-specific driving-force projects** to the investments, adapted for their social and economic realities.
6. Accelerating **digitalisation of the government procedures** required to carry out the investments.
7. **Speeding up implementation** of the key project lines encompassed by the **PERTEs**, facilitating maximum participation and access to the funds by the SME universe by leveraging the positive Digital Kit use case. The existence of highly atomised tenders in very specific areas with tight deadlines is impeding SME and self-employed participation. There is a need to design broader-scope tenders with high levels of public sector co-financing and enable remote and red tape-free access, as showcased very successfully by the Digital Kit initiative.
8. Adding **new large-scale projects for investing in human capital** with high potential to absorb funds related with structural reforms (**wage top-ups for training and learning**, financial aid for companies funding individual capital accounts[22] that foster job mobility, and the creation of a **national skills, reskilling/upskilling, and job intermediation platform**, for example).
9. **Involving the financial sector** to speed up the grant process and boost its reach[23]. More specifically, greater involvement by the banks in the funds'

[21] https://www.esade.edu/itemsweb/wi/Prensa/EsadeEcPol_EY_Brief19_TomandoPulso.pdf?mkt_tok=NTIwLVJYUC0wMDMAAAGB89Bmq_D8ri2sOYx31NOfAfZudUvou8srvFIbYyZ5C2HfggKdtjyDOxHQMztSstx6Wc2ZHMwYG2gArUTDwNs

[22] https://elpais.com/economia/2020-07-17/una-nueva-oportunidad-para-el-seguro-individual-de-empleo.html

[23] https://www.aebanca.es/noticias/articulos/por-su-capilaridad-y-conocimiento-del-cliente-la-banca-

implementation would speed up execution and extend reach, particularly for SMEs and self-employed professionals, regardless of their sector or size.

10. **Reinforcing the transparency**, information dissemination and results reporting mechanisms, among others. By this we mean increasing the communication effort around how the funds work and the calls for proposals and improving transparency with respect to implementation and results.

    Very specifically, it is important for the main web portal set up by the government to host the universe of calls and tenders organised by the entire public sector and not just the central government. It is important to disclose the volume of funds reaching the real economy. To that end, the CoFFEE tool, developed by the Ministry of Finance and Civil Service, needs to be fully operational.

In its first few months in existence, NextGenerationEU has left a bittersweet taste. Particularly on account of the limited contribution of its investments to the recovery and of its reforms to resilience. We have the opportunity to transform the country by means of effective implementation of the Recovery and Resilience Plan, while contributing to European integration in parallel. Our national plan is key to defining the Europe future next generations will experience. That is why it requires everyone's input. There is still time.

BIBLIOGRAPHY

AEB (2021). *Rol de las entidades financieras en los fondos Next Generation EU* [Role of the banks in the Next Generation EU funds], July 2021.

Bank of Spain (2022). *Heterogeneidad en el impacto del Programa de incentivos para la adquisición de vehículos eléctricos en España* [Heterogeneous impact of the incentive scheme for the purchase of electric vehicles in Spain], October 2022.

BBVA Research (2022). Pension schemes in the current demographic scenario: Spain and the EU |

BOE (2020). *Real Decreto-ley 36/2020, de 30 de diciembre, por el que se aprueban medidas urgentes para la modernización de la Administración Pública y para la ejecución del Plan de Recuperación, Transformación y Resiliencia* [Royal Decree-Law 36/2020 (of 30 November 2020), enacting urgent measures for the modernisation of government and execution of the Recovery, Transformation and Resilience Plan] December 2020.

BOE (2021). *Orden CIN/1502/2021, de 27 de diciembre, por la que se aprueban las bases reguladoras de la concesión de ayudas públicas a proyectos de colaboración público-privada, del Programa Estatal para Impulsar la Investigación Científico-Técnica y su Transferencia, del Plan Estatal de Investigación Científica, Técnica y de Innovación 2021-2023, en el marco

puede-ayudar-que-los-fondos-europeos-lleguen-a-muchas-empresas/

del Plan de Recuperación, Transformación y Resiliencia, y por la que se aprueba la convocatoria de tramitación anticipada correspondiente al año 2021 [Ministry of Science and Innovation Order CIN/1502/2021, of 27 December 2021, approving the rules for extending public aid to public-private collaboration projects, the state programme for driving scientific and technical research and its transfer and the state plan for scientific and technical research and innovation, 2021-2023, under the scope of the National Recovery and Resilience Plan], December 2021.

CEOE (2021) *Importancia transformadora de los proyectos con cargo a los fondos Next Generation EU* [Importance of the transformational potential of the projects funded under Next General EU], February 2021.

CEOE (2022) *Marco general del Plan Europeo de Recuperación* [General framework of the European Recovery Plan], June 2022.

CEOE (2022) European Projects Office, November 2022.

European Commission (2021). Council implementing decision on the approval of the assessment of the recovery and resilience plan for Spain, June 2021.

European Commission (2021). NextGenerationEU green bonds, April 2021.

European Commission (2021). Regulation (EU) 2021/241 of the European Parliament and of the Council, of 12 February 2021, establishing the Recovery and Resilience Facility.

European Commission (2022). Fiscal Statistical Tables providing background data relevant for the assessment of the 2022 Stability and Convergence Programmes, May 2022.

European Commission (2022). Positive preliminary assessment of the satisfactory fulfilment of milestones and targets related to the second payment request submitted by the Kingdom of Spain on 30 April 2022, transmitted to the Economic and Financial Committee by the European Commission, June 2022.

Spanish House of Deputies (2022). Table itemising legislative initiatives currently at the amendment proposal stage, November 2022.

European Council (2020). European Council conclusions, 17 - 20 July 2020, July 2020.

El País (2020). *Una nueva oportunidad para el seguro individual de empleo* [A new opportunity for individual employment insurance], July 2020.

EsadeEcPol-EY Insights (2022). NextGenEU Spain Observatory, November 2022.

EsadeEcPol-EY Insights (2022). *Tomando el pulso a NextGenerationEU* [Taking stock of NextGenerationEU], December 2021.

Government of Spain (2021). Transfer to Spain of the first tranche of funds by the European Commission, December 2021.

Government of Spain (2022). Recovery, Transformation and Resilience Plan: Lever Policies and Components, November 2022

IGAE (2022). Extract from the monthly budget outturn figures, September 2022.

Ministry of Industry, Energy and Tourism (2022). Definitive resolution for the electric and connected vehicle strategic project call, October 2022.

7. TOWARDS A NORMALISATION OF FISCAL POLICY

Mario Alloza and Ángel Gavilán

ABSTRACT

At the beginning of the COVID-19 pandemic, the Council of the European Union (EU) activated the Stability and Growth Pact's (SGP) escape clause. Before the start of the war in Ukraine, the Commission had suggested that the escape clause could be deactivated in 2023. However, taking into account the setback to EU growth caused by the war, the deactivation of this clause was postponed by a year. In the event, the EC has issued a Country Specific Recommendation for highly-indebted countries for 2023 that highlights the importance of avoiding an aggregate fiscal stimulus to the economy. Against this background, this chapter addresses three issues. First, it discusses how fiscal policy should respond in the EU to the current high and persistent inflationary pressures, deteriorated public finances, a considerable degree of uncertainty, and an energy crisis. Second, it discusses what else European policies could do in the fiscal domain to make the EU more resilient, especially, from a medium- and long-term horizon. Finally, this chapter takes Spain as an example of a high-debt EU country, and discusses why the implementation of a gradual fiscal consolidation plan needs to start already and what factors should be considered in the design of such a plan.

7.1. INTRODUCTION

At the beginning of the COVID-19 pandemic, the Council of the European Union (EU) activated the Stability and Growth Pact's (SGP) escape clause. As a result, the deficit and debt requirements of the European fiscal rules were temporarily suspended, enabling national fiscal policy to respond decisively to the health crisis and significantly mitigate the adverse effects of the pandemic on the EU economies.

Before the start of the war in Ukraine, the European Commission (EC) had suggested that the escape clause could be deactivated in 2023, on the grounds that the economic recovery in the EU would be sufficiently advanced by then for fiscal policy normalisation to begin. However, taking into account the setback to EU growth caused by the war, the deactivation of this clause was postponed by a year.

In the event, the EC has issued a Country Specific Recommendation (CSR) for highly-indebted countries for 2023 that highlights the importance of avoiding an aggregate fiscal stimulus to the economy. In particular, the CSR suggests that (i) all Member States should use nationally financed public investment as well as the Recovery and Resilience Fund (RRF) grants and other Next Generation EU (NGEU) funds to "expand public investment for the green and digital transition and energy security", and, for high-debt countries, that (ii) Member States should adopt a prudent fiscal policy by "limiting the growth of nationally financed primary current expenditure below medium-term potential output growth, taking into account continued temporary and targeted support to households and firms most vulnerable to energy price hikes and to people fleeing Ukraine".

Against this background, this chapter addresses three issues. First, it discusses how fiscal policy should respond in the EU to the current economic juncture, characterised by high and persistent inflationary pressures, deteriorated public finances (after the sizable fiscal stimulus provided to counteract the negative effects of the pandemic), a considerable degree of uncertainty, and an energy crisis which is having extraordinary asymmetric effects across households, firms and economic sectors. Second, it discusses what else European policies could do in the fiscal domain to make the EU more resilient, not just from a short-run perspective but, especially, from a medium- and long-term horizon. Finally, this chapter takes Spain as an example of a high-debt EU country, and discusses why the implementation of a gradual fiscal consolidation plan needs to start already[1] and what factors should be considered in the design of such a plan.

7.2. FISCAL POLICY RESPONSE IN THE CURRENT JUNCTURE: SOME GUIDING PRINCIPLES

In brief, the economic landscape at end-2022 may be characterised as follows: high and persistent inflationary pressures globally (which have intensified since the start of the war in Ukraine) have elicited a forceful response from the main central banks. This has caused global financial conditions to tighten significantly, which has in turn, together with high levels of uncertainty and an acute drop in the confidence of consumers and firms (whose incomes have increasingly been losing purchasing power in real terms), led to a material slowdown in global economic activity. On account of its geo-

[1] See Hernández de Cos (2022) for a call for such a fiscal consolidation plan.

graphical proximity to the conflict and its reliance on commodity imports from Russia (especially gas imports), this deterioration of both inflation and growth dynamics has been particularly intense in the EU. Indeed, in line with this situation, over the last few months, the vast majority of economic analysts have revised their global and EU growth forecasts systematically and very significantly downwards, while repeatedly making upward corrections to their inflation forecasts.

Taking into account (i) the elevated inflationary pressures in the EU and how the ECB is responding to them, (ii) the very high levels of public deficit and public debt that many EU countries exhibit, and (iii) the extremely asymmetric impact that both inflation and the energy crisis are having on households, firms and economic sectors, the response of fiscal policy to such a complex and adverse scenario should be based on the following principles.

First, a broad-based fiscal impulse should be avoided, not only because the fiscal space is relatively limited, but also because it would exacerbate the current inflationary pressures. In this regard, bearing in mind that the roll-out of investment projects under the NGEU programme already represents an appreciable fiscal stimulus in the EU, in other respects fiscal policy – especially in the high-debt EU countries – should maintain a neutral or even slightly restrictive stance.

Second, and related to the need to avoid a broad-based fiscal impulse, aside from deploying investment projects that drive up the EU economy's future growth capacity, in the present circumstances fiscal policy support should be focused on lower-income households – those hardest hit by higher inflation – and on the firms most vulnerable to the recent surge in the prices of many commodities and to the persisting disruption in certain global supply chains.

Third, any fiscal measure deployed to address the current adverse scenario should be temporary, so as to avoid any structural deterioration of the public accounts, especially in high-debt EU countries. Fourth, the fiscal measures to be implemented should avoid any significant distortion of price signals or of economic agents' incentives. Fifth, given the current high level of uncertainty, it would be desirable to be able to adjust the overall fiscal policy stance relatively swiftly to accommodate any potential shock that could modify the growth and/or inflation outlook.

Lastly, strengthening the sustainability of public finances is key in the current circumstances. In EU countries with high levels of debt and/or elevated structural deficits, this would require the definition of a multi-year fiscal consolidation plan. In addition to the medium and long-term benefits of such a strategy, defining the plan early on would generate greater certainty and trust in public policies.

7.3. EUROPEAN POLICIES' ROOM FOR IMPROVEMENT IN THE FISCAL DOMAIN

The Russian invasion of Ukraine has laid bare the EU's vulnerabilities in key sectors, such as energy, as well as the marked disparity between the Member States in their exposure to such vulnerabilities. A challenge of this magnitude underlines the importance of a joint response to common risks. As with the COVID-19 pandemic, the response to the war in Ukraine must, once again, be more Europe.

A resolute joint response must apply both to short-term measures, to address potential energy supply problems in the coming quarters (in line with the recent EC proposals), and to more structural, medium and long-term initiatives. Regarding the latter, it is imperative, for instance, that the banking union be completed - with the establishment of a European deposit guarantee scheme - and that progress be made in developing the capital markets union. Focusing on the fiscal policy domain, there is also significant room for improvement in several dimensions.

First, the European fiscal framework is awaiting a complete overhaul. The EC has already communicated the main elements of its proposal for a new framework. This proposal is expected to be debated over the next few months before being eventually ratified by the Council of the European Union ahead of its expected implementation in 2024. According to this outline proposal, the new framework would gravitate around multi-annual fiscal plans (lasting 4 to 7 years), to be bilaterally negotiated between the EC and individual countries. In these plans, the EC would propose a net government expenditure path compatible with the long-run sustainability of public debt. The design of these plans should also observe the requirement for government deficits to be below 3% of GDP in the medium-run. The fulfilment of such agreements between the EC and individual countries will be subject to yearly surveillance, with closer integration between macroeconomic and fiscal imbalances and a new set of sanctions, including some of a reputational nature.

While it is still too early to undertake a comprehensive evaluation of the EC proposal -it is still far from being a fully detailed operational procedure-, some of its underlying ideas are welcome. In particular, its attempt to simplify the rules and to allow for different speeds of adjustment towards medium-term targets, particularly if that results in a framework that is able to deliver truly counter-cyclical fiscal policies. There are, however, several critical unknowns, such as the precise role that Debt Sustainability Analysis (DSA) tools will play, how the reference debt-reduction plans will be designed, and how effective the new framework will be in ensuring compliance with the new rules (one of the main shortcomings of the previous framework).[2] All these points will need to be clarified well ahead of the expected implementation of the new framework in 2024.

In any case, it is essential that the new fiscal framework take into account the magnitude and disparity of Member States' current budgetary imbalances, be more transparent and predictable, and improve countries' compliance with the rules, which, among other actions, will probably require strengthening the role played by independent fiscal institutions. Only in this way will the new fiscal framework help ensure the sustainability of national public finances in the EU and that countries build up fiscal buffers in good times for use in crisis episodes.

[2] See Alloza et al. (2021) for a critical review of the current European fiscal framework and guidelines for its future reform.

Second, the new European fiscal governance framework should be completed with a number of elements to expand the risk-sharing channels that operate in the EU. In particular, some of the initiatives approved during the pandemic should be expanded, such as the temporary Support to mitigate Unemployment Risks in an Emergency (SURE), launched in April 2020, which has demonstrated how access to EU loans generates significant interest savings for most Member States and also protects them from situations of financial market stress.[3]

It would also be desirable to review and extend the timeframe for the NGEU programme. Not only would this decision increase the likelihood of the NGEU programme having a considerable transformative impact on the economy, by ensuring that the projects to be funded are more carefully selected and by avoiding situations in which some of the funds cannot be deployed on time, but also it would avoid an excessive fiscal impulse over the coming quarters, against a background characterised by inflationary pressures that are already marked.

More generally, permanent new joint funding arrangements should be established to guarantee that the common investment needs across the EU (for instance, to boost digitalisation, combat climate change and move towards EU strategic autonomy) are successfully met, preventing any excessive or highly unequal impact on national public finances or any damaging disruption to the single market. In this respect, common funding arrangements would enable large-scale programmes to be financed, on the basis of shared quality standards, and would provide for a uniform approach for assessing programme execution.

Lastly, the EU would need a central fiscal capacity, with revenue-raising and borrowing capacity, to complement the single monetary policy. In this regard, it should be noted that, under the current fiscal framework, it is not possible to ensure, at any given moment, that the aggregate stance of the national fiscal policies is appropriate for the EU as a whole, which makes it hard to achieve a balanced fiscal and monetary policy mix.

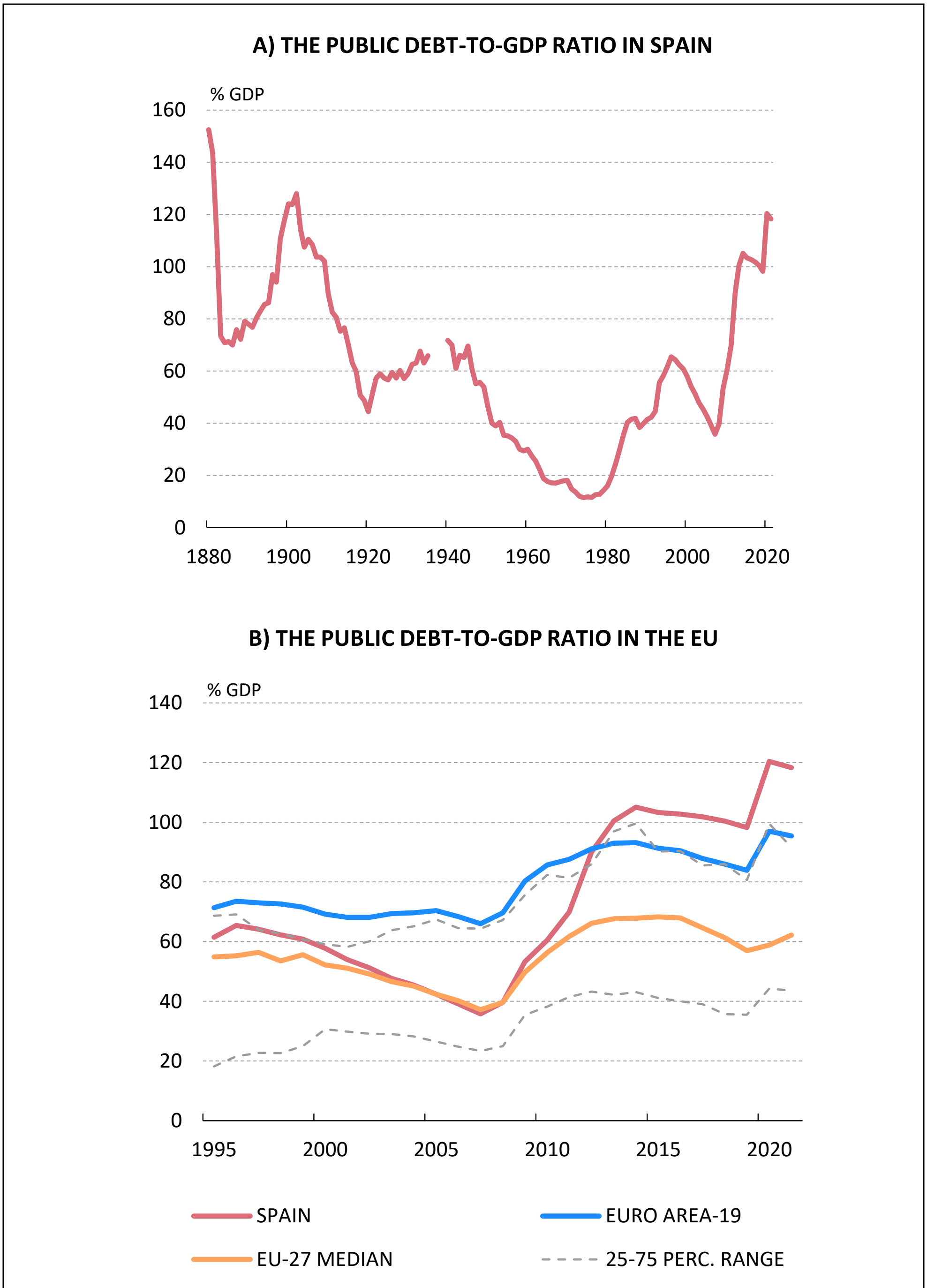
7.4. A HIGH-DEBT EU COUNTRY IN NEED OF A GRADUAL FISCAL CONSOLIDATION PLAN: SPAIN

7.4.1. GLANCE AT THE SPANISH PUBLIC FINANCES OVER THE LAST FEW DECADES

Spain is on course to close 2022 with a debt-to-GDP ratio above 110%, around 20 pp of GDP higher than at the end of 2019, before the pandemic (Figure 1a), and well above average European levels (Figure 1b).

[3] See Burriel et al. (2022).

Figure 1: The Spanish and EU public debt-to-GDP ratio



Sources: Banco de España, Eurostat and Jordà et al. (2017).

Over the years, Spanish public debt dynamics have mostly been characterised by sustained fiscal deficits. Indeed, in recent decades, the Spanish economy has had difficulty generating fiscal surpluses and the median fiscal balance since 1995 has been -3.9% of GDP, with an average of -4.2%. This is especially true when looking at how the drivers of public debt dynamics have behaved over the last decade, a period in which government surpluses have not been able to contribute to debt reduction (Figure 2a). In fact, of the 58 pp increase in the public debt-to-GDP ratio since 2011, 40 pp are due to fiscal deficits (Figure 2b). In contrast, the macroeconomic contribution to public debt dynamics during this period has been mixed: cumulative nominal GDP growth has reduced the ratio by 14 pp, while interest payments have increased it by around 30 pp, reflecting both changes in financial conditions and a snowball effect arising from the existence of an elevated stock of public debt.

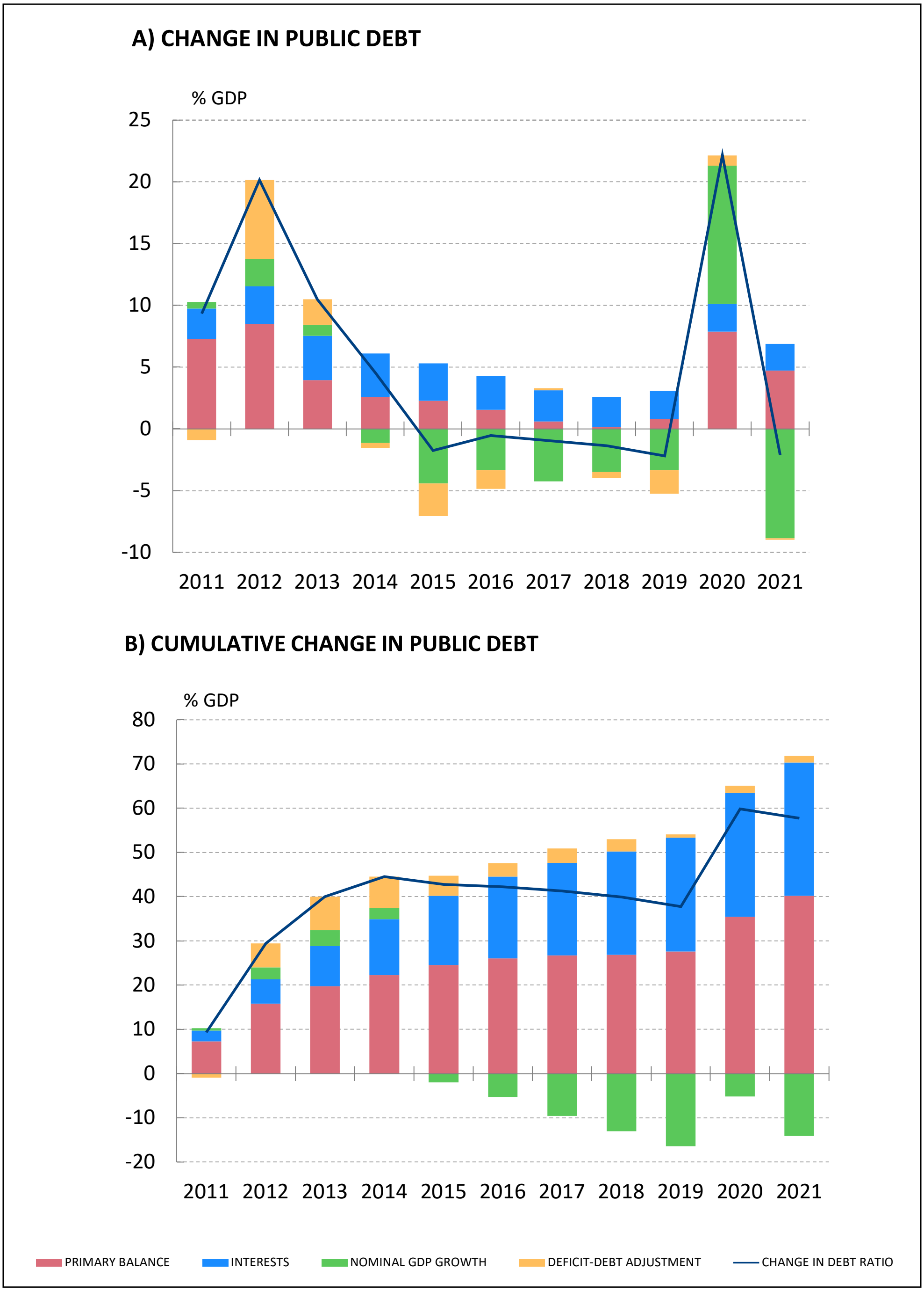
Frequently, the increase in fiscal deficits and public debt in Spain has been the result of the government response to adverse macroeconomic shocks. Indeed, on average, the Spanish public debt-to-GDP ratio has increased by almost 20 pp and by more than 30 pp in the first and second year, respectively, after a recession (Figure 3a). This pattern has been particularly noticeable in recent years, when the deployment of fiscal measures required to fight the economic and health crisis triggered by the pandemic raised the fiscal deficit in 2020 by almost 7 pp, to 10.1% of GDP. Similarly, the COVID-19 crisis pushed up the public debt-to-GDP ratio by slightly more than 22 pp, to 120% of GDP in 2020. This fiscal deterioration has also been evident at a structural level, with an increase of 1.1 pp in the total structural deficit with respect to 2019 (the primary structural deficit also rose to 2.3%, up from 0.8% in 2019).[4]

In any case, while the recourse to fiscal deficits has been required to stabilise economic fluctuations in Spain over the last few decades, fiscal policies have, in general, been unable to take advantage of favourable times to build sufficient buffers. The effect of the business cycle on public finances has been asymmetric in Spain: in years with a contracting output-gap (measured as the difference between actual and potential GDP), the total fiscal surplus decreased, on average, by 1.5 pp (Figure 3b).[5] However, the recovery of the fiscal position was more muted during periods with an expanding output gap, the total fiscal surplus increasing on average by less than 1.2 pp. The same is true when considering the change in the structural primary balance as a percentage of potential output, a more accurate indicator of the fiscal impulse implemented by the authorities. On average, this surplus deteriorated by 0.2 pp in years with a contracting output gap, while it only improved by 0.13 pp during periods with an expanding output gap.

[4] The effect of the COVID-19 pandemic on public finances can also be appreciated in the rapid increase in public expenditure as a percentage of GDP, from 42.3% in 2019 to around 50% in 2021 (excluding NGEU-related expenditure). In 2022, this ratio is expected to remain well above pre-pandemic levels.

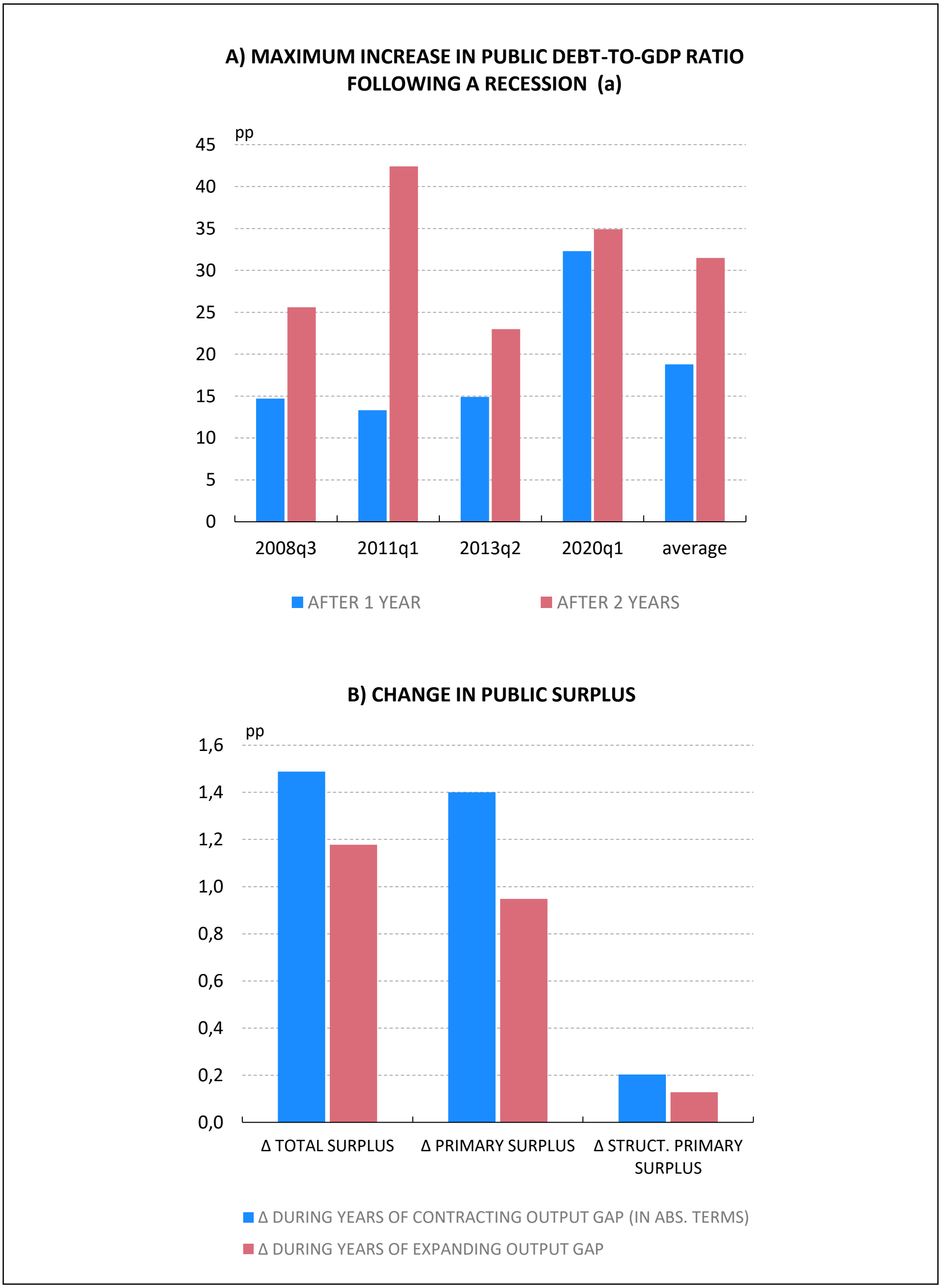
[4] Larch et al (2021) show that fiscal policy pro-cyclicality has also been the norm in a broad set of countries. The authors argue that compliance with fiscal rules tends to be conducive to counter-cyclicality.

Figure 2: The determinants of public debt dynamics in Spain.



Sources: IGAE, INE and Banco de España.

Figure 3: The response of fiscal policy over the business cycle.



Sources: IGAE, INE and Banco de España.
(a) A recession is defined as a period of two consecutive quarters of negative real output growth (between 1995 and 2021).

7.4.2. WHY DOES SPAIN NEED A GRADUAL PROCESS OF FISCAL CONSOLIDATION?

This section reviews some of the factors that have been highlighted previously when considering the relationship between excessive public debt and economic performance. As a whole, these factors point to the desirability of initiating a gradual process of consolidation of the public finances in Spain.

First, excessive public leverage might impair the ability of fiscal policy to act as a stabilisation mechanism. An elevated stock of public debt might impede fiscal authorities from borrowing in financial markets if the change in debt is large enough to entail risks to fiscal sustainability. Furthermore, increases in public debt beyond a "prudent" debt threshold, tend to generate higher vulnerabilities to sudden changes in market sentiment.[6] This problem might be compounded when debt structures show a comparatively high share for short-run liabilities.

Second, sustaining high levels of public debt generates macroeconomic distortions that can negatively affect economic growth. On the one hand, an elevated stock of public debt requires the absorption of resources that could have been employed in alternative, more productive, uses. In particular, persistently high levels of public debt exert upward pressure on long-term interest rates, increasing private-sector financing costs and, in turn, negatively affecting private investment (the so-called crowding-out effect).[7] On the other hand, sustaining a large public debt-to-GDP ratio requires running sufficiently high fiscal surpluses over a prolonged period of time, a policy that could require increases in distortionary taxation or cuts in productive public spending, which could negatively affect economic dynamism.

Third, the existence of excessive levels of public debt might slow down the recovery after a financial crisis. In the aftermath of a leverage-driven financial crisis, the economy tends to start a process of private deleveraging. The literature has found that this process can result in higher output losses when the economy inherits high levels of public debt, which act as a substantial drag on the recovery. In this context, fiscal consolidations that take place *after* a crisis, if not properly timed and gauged, can also negatively affect this deleveraging process.[8]

Fourth, compliance with new institutional frameworks -namely, the ECB's new anti-fragmentation tool (the Transmission Protection Instrument, TPI) and the upcoming

[6] See IMF (2021a). Alloza et al (2020) provide a methodology to estimate prudent debt limits, with an application to the Spanish case.

[7] See Hernández de Cos et al. (2018).

[8] See Jordá et al. (2016) for empirical evidence characterising the process of private deleveraging in the aftermath of a financial crisis and how excessive public debt can hamper the recovery from such crisis. Andrés et al. (2020) show that the private deleveraging process that follows an adverse financial shock can be explained by the fact that agents' collateral falls below the level of their outstanding debt. In this context, a large-scale and/or front-loaded process of public deleveraging (a fiscal consolidation) could negatively affect the economic recovery, insofar as it may affect the disposable income of private agents and, hence, delay private deleveraging.

new European fiscal framework- is a further reason for pressing ahead with fiscal consolidation. In particular, if the TPI is eventually activated in any given euro area country, it will be subject to certain eligibility criteria. Chief among these criteria is the pursuit of sound and sustainable fiscal policies, as assessed by the Governing Council of the ECB.[9] In this context, a process of fiscal consolidation that aims to achieve a sustainable path for public debt might also act as a safeguard against potential increases in financing costs above the levels compatible with the country's fundamentals.

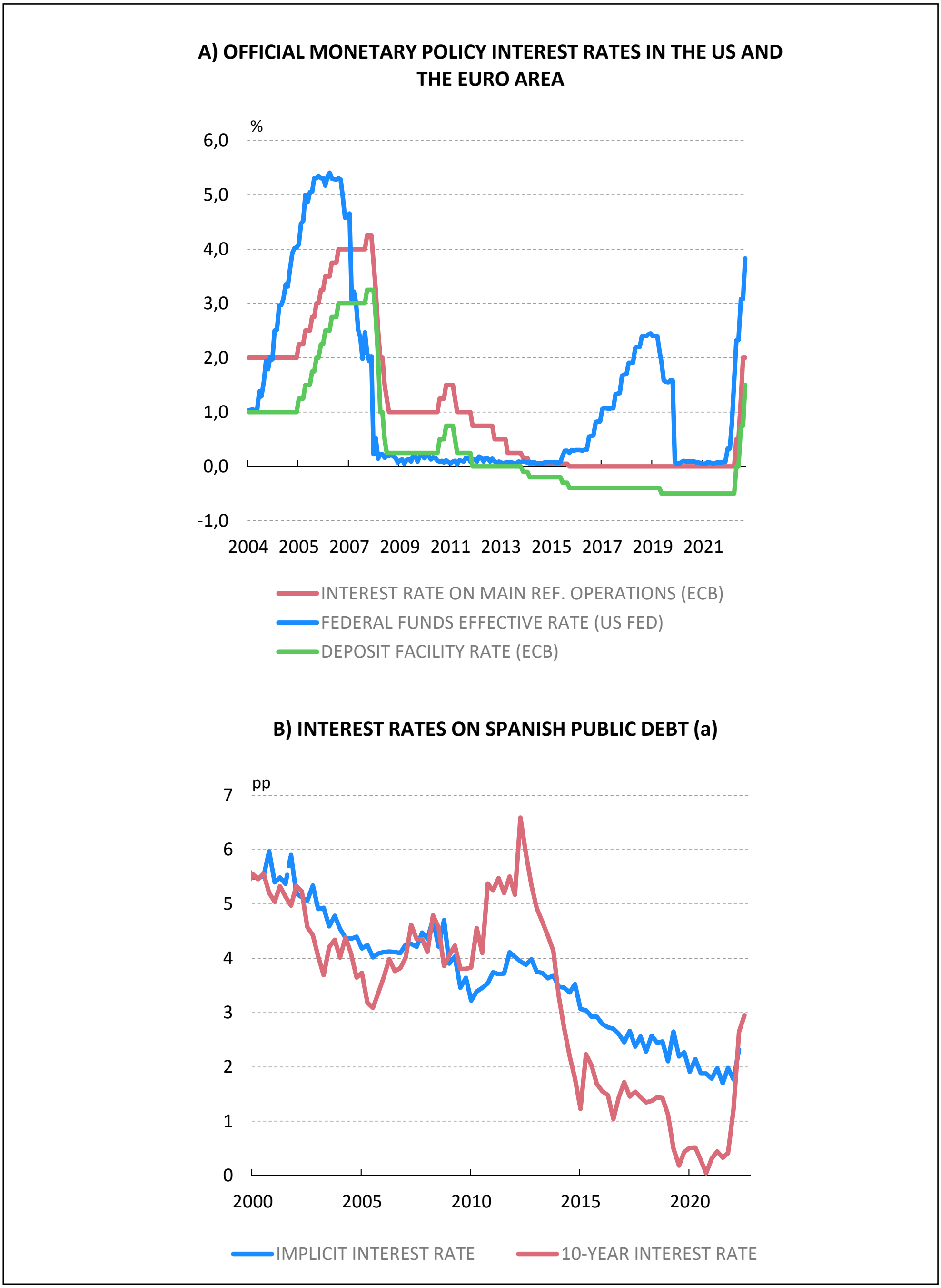
Fifth, over the last few quarters, rapidly increasing policy rates and public-debt financing costs[10] (Figure 4) have highlighted the need to reduce the stock of public debt. All this in a context in which the sign of the difference between the return on safe assets (r) and the growth rate of output (g) may be changing structurally from negative to positive, posing new risks to fiscal sustainability in high-debt countries.

In this respect, the current level of public indebtedness in Spain, coupled with increasing ageing costs, entails a constant structural deficit that could drive the public debt-to-GDP ratio towards unstable trajectories. In particular, according to the simulations conducted by the Banco de España, under various assumptions regarding future economic growth and interest rate developments, a failure to make any fiscal adjustments in Spain in the coming years, together with the pressures on public expenditure entailed by an ageing population, would lead to a gradual rise in the public debt-to-GDP ratio (Figure 5a). Conversely, in an alternative scenario in which consolidation efforts are made, for instance, to improve the structural primary balance by 0.5 pp of potential GDP per year, until reaching a total structural balance equilibrium, public debt could fall to close to 70% of GDP by 2040. Moreover, if the adjustment described in this last scenario were to be accompanied by an ambitious package of structural reforms that enhanced the Spanish economy's growth capacity, the debt-to-GDP ratio would fall even further. However, the structural primary balance required to achieve these debt dynamics could be substantially increased in the event of higher financing costs (Figure 5b). All in all, these simulations illustrate the importance of implementing an ambitious fiscal consolidation to enable these imbalances to be gradually corrected.

[9] For further details regarding the TPI and these eligibility conditions, see The Transmission Protection Instrument, ECB press release, 21 July 2022.

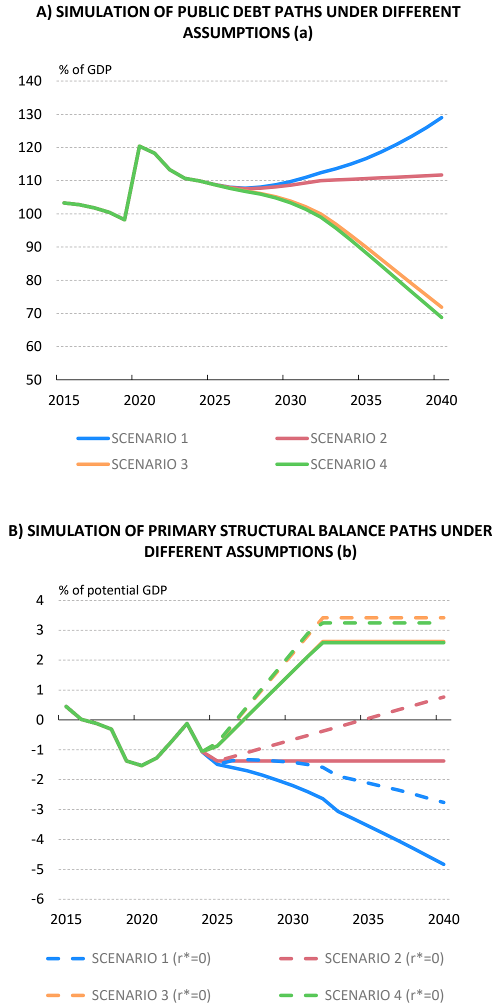
[10] In Spain, the current structure of debt maturity (for instance, the average term of central government securities is now more than 8 years, slightly above the levels recorded prior to 2009) has so far attenuated the pass-through from market rates to the implicit cost of debt. In contrast, in a such a high inflationary scenario as the current one, the cost of inflation-indexed bonds (which represent around 5% of the total outstanding debt in Spain by end 2021) has been rapidly increasing.

Figure 4: Recent interest rate developments.



Sources: Banco de España and FRED Economic data. (a) The implicit interest rate is computed as the ratio of annualised current interest payments to previous-quarter total public debt.

Figure 5: Simulations of public debt dynamics.



Sources: Banco de España.
(a) All scenarios include a deterioration of the primary structural balance until 2040 due to ageing costs (pensions, health and long-term care). Scenario 1 assumes a fiscal policy that does not correct this deterioration. Scenario 2 refers to a fiscal policy that makes a consolidation effort consistent with maintaining a primary structural balance similar to pre-pandemic levels. Alternatively, scenario 3 assumes a fiscal policy that makes an additional adjustment to the primary structural balance of 0.3 pp of potential GDP each year until the total structural balance reaches a value of 0. Scenario 4 modifies scenario 3 with a long-term potential GDP growth of 1.9% (instead of the 1.3% assumed in the other scenarios).
(b) For each simulation, the solid lines indicate the primary structural balance associated with the public debt paths in the left-hand panel, in a baseline scenario determined by a future interest rate path consistent with the consensus forecast of the survey of monetary policy analysts (SMA). The dotted lines illustrate the primary structural effort required to achieve the same public debt paths in an alternative scenario, in which interest rates increase by 1.5 pp in the long term, with respect to the baseline scenario to which they refer (solid lines).

7.4.3. FISCAL CONSOLIDATIONS: WHAT HAVE WE LEARNT?

Spurred by the impact of the Great Financial Recession, fiscal research has actively engaged over the last decade in seeking to understand the impact of government and tax policies in different macroeconomic environments, offering particularly insightful findings regarding the characterisation of successful fiscal consolidation processes.[11]

First, fiscal policy might be more impactful than previously thought, which implies that the speed of fiscal consolidations should be carefully gauged. Indeed, this observation might help explain why previous fiscal consolidation episodes were associated with large forecast errors.[12] Hence, the timing of the consolidation should take into account the current state of the business cycle, in order not to impose an excessive drag on an already deteriorating economy.[13] This will be particularly important when other macroeconomic phenomena, such as a process of private deleveraging, are taking place concurrently.[14]

Second, the composition of fiscal policy matters. Tax revenues are generally found to have larger multipliers than their spending counterparts. Hence, fiscal consolidations that rely heavily on spending cuts tend to be less harmful in terms of economic growth than those based on tax hikes.[15] Additionally, consolidations that are heavily biased towards productive spending can have long-lasting effects on future output. For example, public investment played a disproportionate role in the Spanish fiscal consolidation plans in 2009-2016, when it contributed around 70% of the adjustment in primary expenditure, as compared with a contribution of 20% in the consolidation process of 1993-2000 (Figure 6a).[16] This over-representation of public investment in a consolidation episode can have a detrimental impact on the accumulation of productive public capital. Indeed, this might have been the case in Spain where, given its high depreciation rates, the stock of intangible public capital (e.g., software and R+D) has decreased sharply since 2009 (Figure 6b).

Third, interactions between fiscal and monetary policies are key to finding the optimal mix to stabilise output. While it remains unclear how much the effect of fiscal policy varies over the business cycle, there is an emerging consensus that the impact of government spending can be particularly sizeable during periods in which monetary policy is close to its effective lower bound.[17] This might be due to the effects of

[11] See Ramey (2019) for a comprehensive review of recent advances in the literature relating to fiscal policy.

[12] See Blanchard and Leigh (2013).

[13] See Jordá and Taylor (2016).

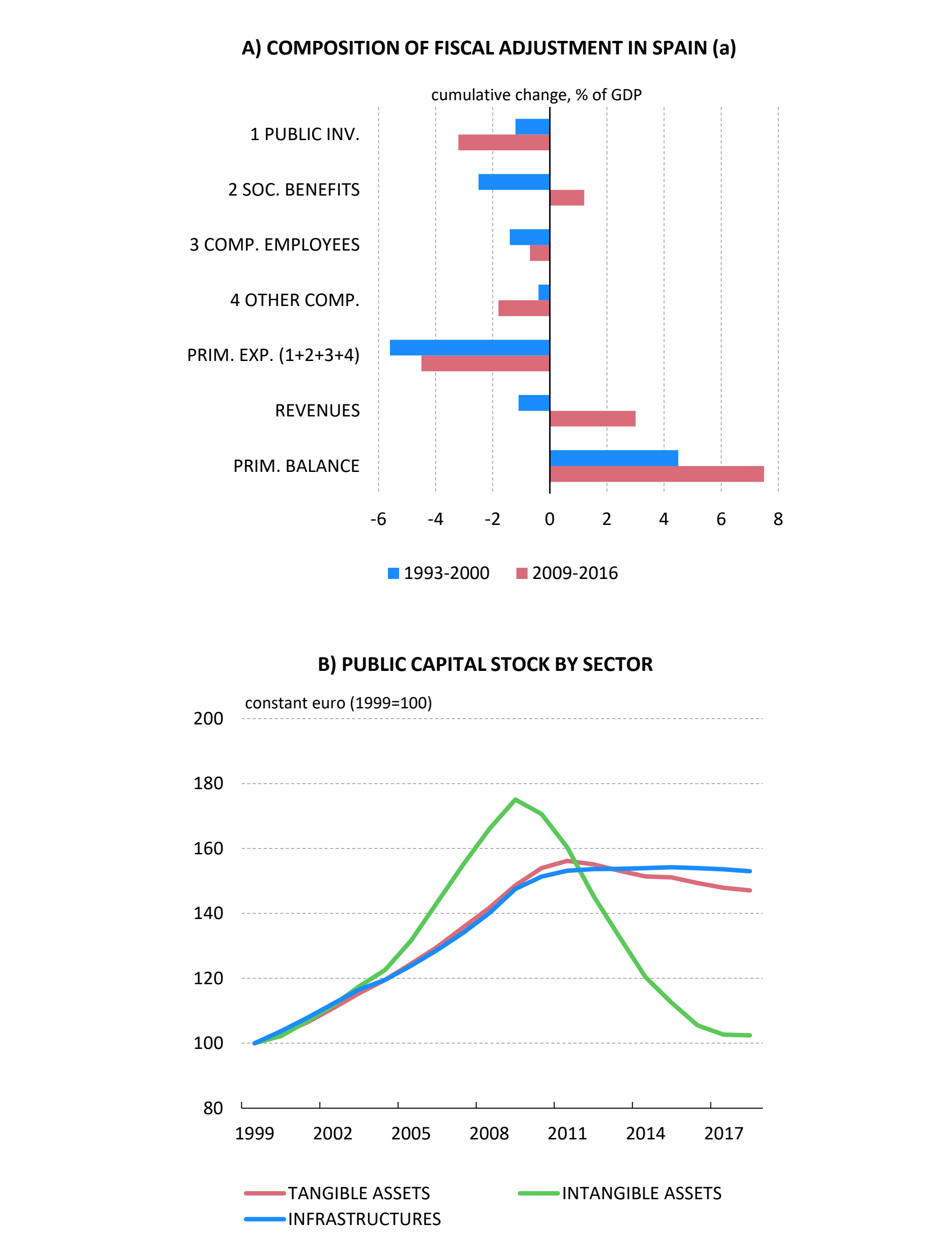
[14] Andrés et al. (2020) show that in such a context, a fiscal consolidation should be executed in a gradual manner.

[15] See Alesina et al (2015).

[16] See Pérez y Solera (2017).

[17] See Ramey and Zubairy (2018), who use historical variation in the United States to estimate government spending multipliers that are twice as large during periods of zero lower bound than in normal times (although they are below unity in both cases).

Figure 6: The role of public investment in fiscal consolidations.



Sources: IGEA, IVIE and Banco de España.
Note: "PUBLIC INV." refers to public investment, "SOC. BENEFITS" to social benefits, "COMP. EMPLOYEES" to compensation of employees, "OTHER COMP." to other public expenditure components, "PRIM. EXP." to primary expenditure and "PRIM. BALANCE" to the primary balance.

government spending on agents' inflation expectations, which during periods of constrained monetary policy, drive down real interest rates and spur private consumption and, hence, aggregate output.[18]

Fourth, contexts characterised by deteriorated public finances and constrained monetary policy can give rise to belief-driven equilibria, where pessimistic shifts in agents' expectations can lead to further deterioration in public finances through a sovereign risk-premium channel that might spill over to the real economy. In this scenario, fiscal consolidations can reduce pressure in the sovereign market and improve output.[19]

Fifth, the design and communication of any consolidation process needs to internalise the fact that uncertainty about future policies might have a detrimental effect on activity. The lack of information regarding future permanent government actions might lead economic agents to take ex-post suboptimal decisions.[20] More generally, unexpected changes in fiscal policies might have negative consequences for economic activity insofar as they reduce future investment.[21] These results suggest that the early resolution of uncertainty surrounding the details, composition and timing of future fiscal consolidation packages, as well as avoiding "fiscal noise" (news about policies with a low probability of implementation) could have a positive impact on output and welfare.

Lastly, a high-inflation process does not necessarily lead to a smoother fiscal consolidation process. Recent evidence suggests that, although inflation can initially help in a fiscal consolidation process, interest rates on new debt often rise fast enough to offset all or part of the positive effect of inflation.[22] This insight could be particularly relevant in a context where the inflationary process has an imported origin as opposed to being driven by domestic demand. In this regard, model-based simulations for the case of Spain show that an imported energy price shock that pushes inflation up by 1% would lead to an estimated deterioration in the general government balance and the public debt-to-GDP ratio of 0.2 pp and 1 pp of GDP, respectively, three years later.[23] In other words, the effect of such a shock on the public deficit over a medium-term horizon would be negative.

Indeed, there is recent research that shows that it is particularly important for monetary policy and fiscal policy to be coordinated in a high-inflation scenario.[24] In such a context, excessive levels of public indebtedness and lack of confidence in the fiscal authority to rein in public debt dynamics might hamper the role of monetary policy in bringing trend inflation to its target level. The ideal solution would be for monetary

[18] See Christiano et al (2011).

[19] That is, under certain conditions, the government spending multiplier might even become negative. See Corsetti et al. (2012).

[20] See Bertola and Drazen (1993) and Bi et al. (2013).

[21] See Fernández-Villaverde et al. (2015).

[22] This is the conclusion in Eichengreen and Esteves (2022), who analyse the role of inflation in debt consolidations in up to 183 countries over the last 200 years.

[23] Hernández de Cos et al. (2016).

[24] See Bianchi and Melosi (2022).

tightening to be supported by the expectation of appropriate fiscal adjustment to prevent current fiscal imbalances from feeding into the inflation process and resulting in a further deterioration of the economy and public finances.

7.4.4. SOME GUIDELINES FOR THE DESIGN OF A FISCAL CONSOLIDATION PLAN

As mentioned above, in the current juncture, it is important - both at EU level and in Spain - to avoid a broad-based fiscal impulse, and fiscal policy should mainly consist of temporary measures that provide support to the most vulnerable households and firms[25] in such a way that significant distortions of price signals and/or of economic agents' incentives are minimised.

In Spain, such a fiscal policy response in the short run should also be compatible with the start, in 2023, of a gradual process of fiscal consolidation. In this regard, it is important to take into account that, even though the implementation of the NGEU programme in Spain may be experiencing certain delays, the roll-out of the investment projects associated with this programme will entail a material fiscal impulse to economic activity. Against this background, the rest of fiscal policy in Spain should maintain a slightly contractionary stance throughout 2023 to offset somewhat the expansionary impulse from the NGEU funds. By way of illustration, a reduction in the structural public deficit in Spain of around 0.5 pp of GDP in 2023,[26] given the range of fiscal multipliers typically considered in the literature, would not be sufficient to offset the estimated contribution of NGEU funds to GDP growth in 2023 (around 0.6 pp). In other words, together with the deployment of NGEU funds, such an initial reduction in the Spanish structural public deficit in 2023 would still entail an overall net fiscal impulse to economic activity in that year.

When designing a multi-year fiscal consolidation plan to gradually strengthen the sustainability of the Spanish public accounts at all administrative levels, the following guidelines should serve as a reference. First, the normalisation of public finances should not be achieved by applying the same rules to all types of spending. On the contrary, special emphasis should be placed on the composition of spending. The decision as to how to allocate public resources and how to implement a fiscal normalisation process is, of course, a political choice.

There are, however, two important considerations that have a bearing on this choice. On the one hand, recent evidence suggests that there is ample room to increase the ef-

[25] However, both at the EU level and in Spain, the vast majority of the policy measures that have been deployed over the last few quarters to mitigate the inflation and energy crisis have not actually been targeted at the most vulnerable households and firms. Indeed, according to several estimates, untargeted measures represent around 70% to 80% of the total budgetary cost of all the measures implemented in 2022.

[26] A figure compatible with the recent recommendation to Spain by the International Monetary Fund in its latest communication framed within the so-called Article IV. See IMF (2022).

fectiveness of several spending policies.[27] On the other hand, as mentioned above, some spending chapters are more likely to have a positive impact on the production capacity of the economy (such as R+D and productive public investment). In this regard, the decision as to what is an appropriate distribution of public investment can be informed by comparing the actual distribution in Spain with that in similar neighbouring economies, while taking into account the insights available in the economic literature. In recent research, Spain is found to devote a smaller share of public spending to education and public investment than the EU average (Figures 7a and 7b),[28] chapters that are typically found to be very important for fostering economic growth.[29]

Furthermore, resources devoted to public investments related to climate change, digitalisation and energy autonomy should not be penalised as part of a fiscal consolidation strategy, since these investments are critical to achieve robust, sustainable and resilient growth rates in the future. And, in this regard, for instance, the structural transformation towards a less carbon-dependent economy will require additional cumulative public investment in the EU of between 0.5% and 4.5% of GDP over the period 2021-2030.[30] In Spain, an important part of these investment needs will be funded by projects contained in the Spanish Recovery and Resilience Plan, where around 37% of the expected RRF funds will have an environmental component. In a similar vein, the recently approved allocation of the REPowerEU programme (which has assigned around €2.6 billion to Spain) will help to improve Spain's energy autonomy. However, given the magnitude of the investment requirements, it is likely that these European funds will eventually need to be complemented by national funding to achieve the intended transformations.[31]

Second, a rigorous and ambitious fiscal normalisation plan should thoroughly review the current design of tax policy. In particular, there are four important points worth noting when reviewing the role of taxation in Spain. First, as compared with the EU average, public administrations in Spain obtain less revenue as a percentage of GDP

[27] In this regard, the AIReF has analysed in different reports (framed within a process known as Spending Review) the effectiveness of policies such as active employment policies, subsidies, tax benefits, hospital spending and hiring incentives.

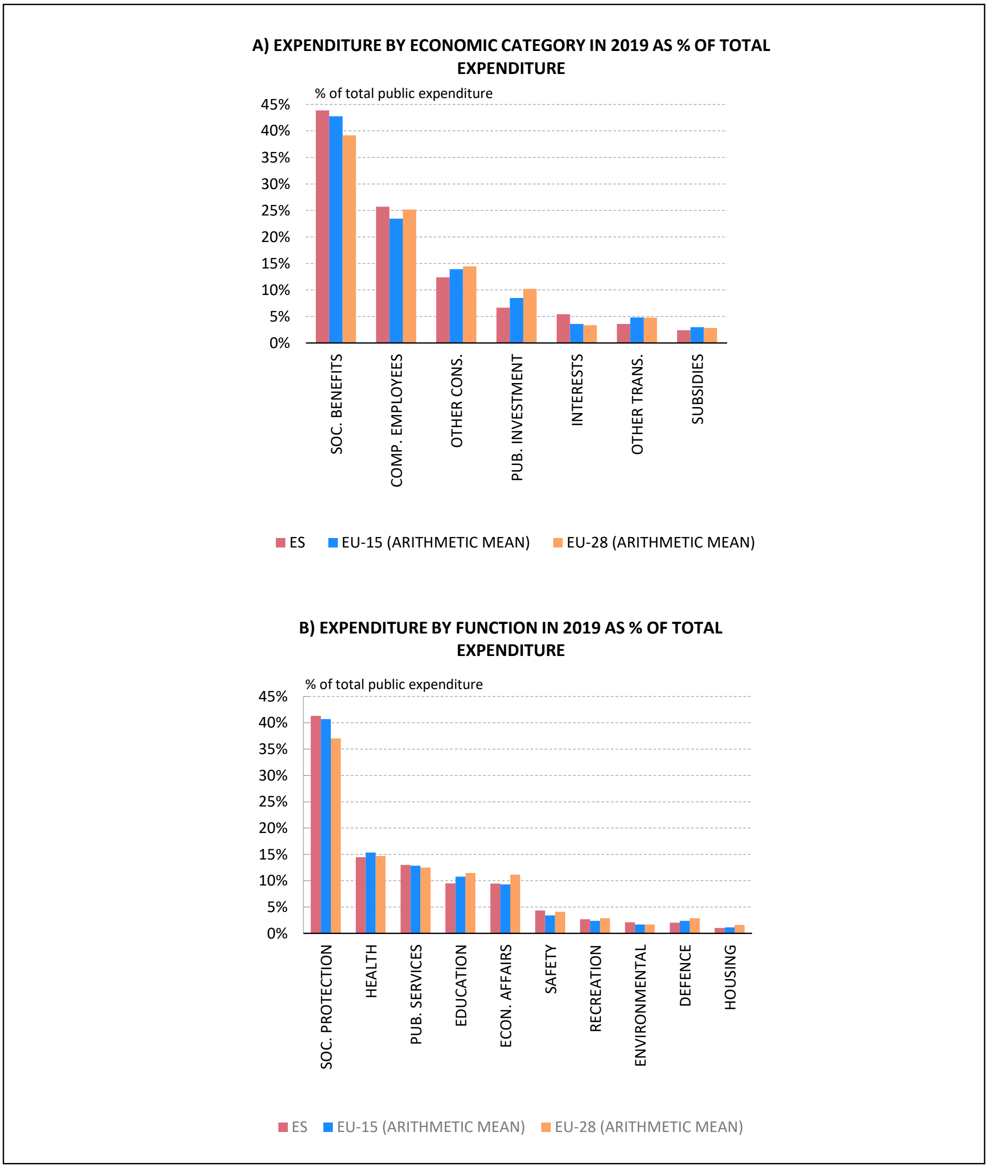
[28] In particular, average public spending on education and public investment in Spain over the period 2015-2019 accounted for 4% and 2.9% of GDP, respectively, figures that are 0.9 pp and 1.5 pp below those observed in the EU. See Alloza et al. (2022).

[29] Moreover, it should be noted that these items contribute decisively to reducing inequality and strengthening intergenerational equity through their role as pre-production redistributive policies (Rodrik and Stantcheva (2021)). In fact, according to the available evidence, differences in items such as public spending on education explain the lower levels of inequality in European countries relative to the United States to a greater extent than tax-based redistributive policies (Blanchet, Chancel and Gethin (2022)).

[30] Most estimates point towards additional public investment of around 2% of GDP, according to sources cited in IMF (2021b).

[31] Caution should be used when identifying investment needs that are truly necessary for the required transformations, avoiding, for example, practices known as *greenwashing* (i.e. labelling certain activities as environmentally sustainable when in reality they are not).

Figure 7: The distribution of public spending in Spain and the EU.



Sources: Eurostat.

Notes: "SOC. BENEFITS" refers to social benefits, "COMP. EMPLOYEES" to compensation of employees, "OTHER CONS." to other expenditure on final consumption, "PUB. INVESTMENT" to public investment and capital transfers, "OTHER TRANS." to other transfers not included in the rest of the categories, "SOC. PROTECTION" to social protection expenditure (e.g. old-age pensions), "PUB. SERVICES" to general public services (e.g. executive and legislative bodies), "ECON. AFFAIRS." to economic affairs (such as subsidies, active employment policies, etc.), "SAFETY" to public order and safety (e.g. police services), "RECREATION" to recreation, culture and religion (e.g. sports services), "ENVIRONMENTAL" to environmental protection (e.g. waste management), "DEFENCE" to defence and military spending, and "HOUSING" to housing and community services (e.g. housing development and water supply).

from indirect taxes and the effective tax on consumption is lower.[32] Catching up with EU levels would yield higher revenues that could be partially used to offset the potentially regressive effect of increases in indirect taxes such as VAT. Second, the recent proposal for tax reform in Spain[33] suggests that an increase in environment-related taxes would play an important role in achieving the climate goals mentioned above. Such a reform should be carefully phased in, after the current energy shock is over, and should also take into account the regressive effects that such increases in environment-related taxes may have on low-income households. Third, all current tax benefits should be thoroughly reviewed, following the initial analysis carried out by AIReF in the context of its Spending Review. Special attention should be given to consumption tax relief measures, since there is a broad consensus that the widespread use of reduced and super-reduced rates of VAT are not efficient policies in terms of redistribution.[34] And, fourth, Spain should continue to collaborate on international initiatives, such as those promoted by the OECD and the EU, that aim to coordinate and harmonise the taxation of corporate and digital activities.

Finally, following a thorough review of public spending and revenue policies, the implementation of ambitious structural reforms might intensify the effects of national and NGEU-related investments and contribute significantly to the fiscal consolidation plan. In this regard, several empirical estimates show that fiscal multipliers for public investments are positively dependent on structural reforms.[35] In particular, according to some of this research, implementing structural reforms that lower barriers to competition in the product market and reduce rigidities in the labour market would lead to a significant increase in the expansionary effect of the European funds in the medium term (Figure 8a). In the same vein, according to Banco de España estimates, if a careful selection of NGEU projects were to be accompanied by various structural reforms to ease the rigidities in the product and labour markets, the potential growth rate of the Spanish economy could reach around 2% by the end of this decade, nearly 1 pp higher than in the absence of these two factors (Figure 8b).[36]

[32] See López-Rodríguez and Garcia Ciria (2018) for a comparison of tax and spending compositions within European countries.

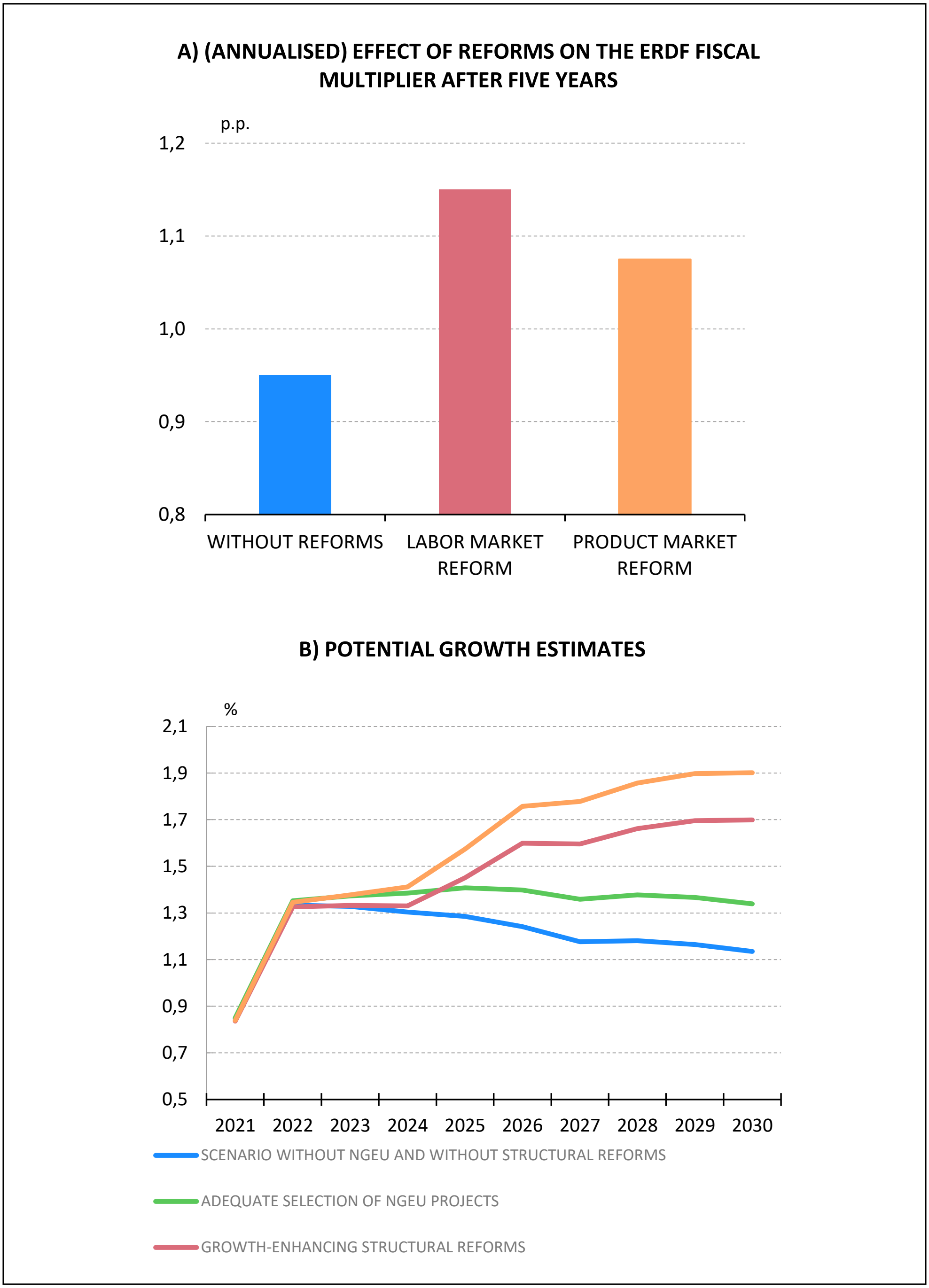
[33] In early 2022, an Experts Committee produced a proposal for a tax reform in Spain known as the Libro Blanco del Comité de Personas Expertas para la Reforma del Sistema Tributario.

[34] Both the AIREF's spending review and the *Libro Blanco del Comité de personas Expertas para la Reforma del Sistema Tributario* point in this direction.

[35] See Albrizio and Geli (2021).

[36] See Cuadrado-Salinas et al. (2022).

Figure 8: The effectiveness of public investment in a context of structural reforms.



Sources: Banco de España (Albrizio and Geli (2021) and Cuadrado-Salinas et al. (2022)).

REFERENCES

Albrizio, S. and Geli, J. F. (2021). "An empirical analysis of the determinants that can boost Next Generation EU's effectiveness". Analytical Articles, *Economic Bulletin* 4/2021. Banco de España.

Alesina, A., Favero, C., and Giavazzi, F. (2015). "The output effect of fiscal consolidation plans". *Journal of International Economics*, 96, S19-S42.

Alloza, M., Andrés, J., Pérez, J. J., and Rojas, J. A. (2020). "Implicit public debt thresholds: An operational proposal". *Journal of Policy Modeling*, 42(6), 1408-1424.

Alloza, M., Andrés, J., Burriel, P., Kataryniuk, I., Pérez, J. J. and Vega-Croissier, J. L. (2021). "The Reform of the European Union's Fiscal Governance Framework in a New Macroeconomic Environment". *Occasional Papers*, 2121. Banco de España.

Alloza, M., Brunet, J., Forte-Campos, V., Moral-Benito, E. and Pérez, J. J. (2022). "El gasto público en España desde una perspectiva europea". *Documentos Ocasionales*, 2217. Banco de España.

Andrés, J., Arce, Ó., Thaler, D., and Thomas, C. (2020). "When fiscal consolidation meets private deleveraging". *Review of Economic Dynamics*, 37, 214-233.

Bertola, G., and Drazen, A. (1993). "Trigger points and budget cuts: Explaining the effects of fiscal austerity". *American Economic Review*, 83(1), 11.

Bi, H., Leeper, E. M., and Leith, C. (2013). "Uncertain fiscal consolidations". *Economic Journal*, 123(566), F31-F63.

Bianchi, F. and Melosi, L. (2022). "Inflation as a fiscal limit". Working Paper, No. 2022-37. Federal Reserve Bank of Chicago.

Blanchard, O. J., and Leigh, D. (2013). "Growth forecast errors and fiscal multipliers". *American Economic Review*, 103(3), 117-20.

Blanchet, T., Chancel, L. and Gethin, A. (2022). "Why is Europe more equal than the United States?". *American Economic Journal: Applied Economics*, 14(4), 480-518.

Burriel, P., Kataryniuk, I. and Pérez, J. J. (2022). "Computing the EU's SURE interest savings Using an extended Debt Sustainability Assessment Tool." *Occasional Paper*, 2210. Banco de España-

Christiano, L., Eichenbaum, M. and Rebelo, S. (2011). "When is the government spending multiplier large?". *Journal of Political Economy*, 119(1), 78-121.

Corsetti, G., Kuester, K., Meier, A. and Müller, G. J. (2013). "Sovereign risk, fiscal policy, and macroeconomic stability". *Economic Journal*, 123(566), F99-F132.

Cuadrado-Salinas, P., Izquierdo Peinado, M., Montero Montero, J. M., Moral Benito, E. and Quintana González, J. (2022). "The potential growth of the Spanish economy after the pandemic". *Occasional Papers*, 2208. Banco de España.

Eichengreen, B. and Esteves, R. (2022). "Up and away? Inflation and debt consolidation in historical perspective". *Oxford Open Economics*, Volume 1.

Fernández-Villaverde, J., Guerrón-Quintana, P., Kuester, K. and Rubio-Ramírez, J. (2015). "Fiscal volatility shocks and economic activity". *American Economic Review*, 105(11), 3352-84.

Hernández de Cos, P., Hurtado, S., Martí, F. and Pérez, J. J. (2016). "Public finances and inflation: the case of Spain". *Occasional Papers*, 1606. Banco de España.

Hernández de Cos, P., López Rodríguez, D. and Pérez, J. J. (2018). "The challenges of public deleveraging". *Occasional Papers*, 1803. Banco de España.

Hernández de Cos, P. (2022). "Testimony before the Parliamentary Budget Committee in relation to the Draft State Budget for 2023". Banco de España.

IMF (2021a). "Chapter 2: Strengthening the credibility of public finances". *Fiscal Monitor*, International Monetary Fund.

IMF (2021b). "Reaching net zero emissions". International Monetary Fund.

IMF (2022). "Spain: Staff Concluding Statement of the 2022 Article IV Mission". International Monetary Fund.

Jordà, O., Schularick, M., and Taylor, A. M. (2016). "Sovereigns versus banks: credit, crises, and consequences". *Journal of the European Economic Association*, 14(1), 45-79.

Jordà, O, and Taylor, A. M. (2016). "The time for austerity: estimating the average treatment effect of fiscal policy". *Economic Journal*, 126-590 (2016): 219-255.

Jordà, O., Schularick, M. and Taylor, A. M. (2017). "Macrofinancial History and the New Business Cycle Facts". in *NBER Macroeconomics Annual 2016*, volume 31, edited by Martin Eichenbaum and Jonathan A. Parker. Chicago: University of Chicago Press.

Larch, M., E. Orseau, and van der Wielen, W. (2021). "Do EU fiscal rules support or hinder counter-cyclical fiscal policy?". *Journal of International Money and Finance*, 112, 102328.

López-Rodríguez, D. and García-Ciria, C. (2018). "Spain's tax structure in the context of the European Union". *Occasional Papers*, 1810. Banco de España.

Pérez, J. J. and Solera, I. (2017). "La evolución de la inversión pública durante la crisis y la recuperación". *Notas Económicas*, 4/2017. Banco de España.

Ramey, V. A. (2019). "Ten years after the financial crisis: What have we learned from the renaissance in fiscal research?". *Journal of Economic Perspectives*, 33(2), 89-114.

Ramey, V. A. and Zubairy, S. (2018). "Government spending multipliers in good times and in bad: evidence from US historical data". *Journal of Political Economy*, 126(2), 850-901.

Rodrik, D. and Stantcheva, S. (2021). "Fixing capitalism's good jobs problem". *Oxford Review of Economic Policy*, 37(4), 824-837.

PART III.

REGULATORY ISSUES

INSTITUTO ESPAÑOL DE ANALISTAS
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FUNDACIÓN

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8. CRYPTO ASSET GLOBAL REGULATION: A RISKY DELAY

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ABSTRACT

Since Bitcoin was introduced in 2009 the crypto phenomenon has been on the rise until recent problems lead to the current "crypto winter". It took too long for regional and local regulators, as the European Union, to feel the need to regulate an economic activity that, no matter how it is measured, showed an exponential growth in last years.

The European Union, with the MICA regulation, intended to take the lead on providing rules and standards to the different crypto-assets, although, even in this case, with a considerable delay. In 2022 some global bodies, as the G-20/FSB and IOSCO have also started to advance in the creation of global standards and, in last December, the Basel Committee on Banking Supervision, issued a relevant standard on the "prudential treatment of crypto-asset exposures". It is likely that if these global regulations had been in place before, part of the problems in the crypto area could have been avoided.

The MICA regulation could be considered as a good base for the future global standards but, above all, the global standard setters should be conscious on the urgent need to have a globally harmonized regulation instead of the fragmented collection of rules we have now. If the crypto economy could a have a future, global legal certainty would be absolutely needed. The objective of this paper is to bring attention to this urgent need of global regulatory action as the main contribution for the future development of financial innovation based on DLT.

8.1. THE UNSTOPPABLE (UNTIL NOW) GROWTH OF THE CRYPTO PHENOMENON.

For years now, and no matter how it is measured, the crypto phenomenon has been on the rise. Global, regional (in our case, European) and national regulators acted in response to the phenomenon with a certain initial parsimony, considering that the phenomenon did not constitute a risk to global financial stability, which was probably true.

However, whether or not they constitute a threat to global financial stability has never been the only parameter to be considered when deciding to regulate any given economic activity. One reason for regulating the nascent "crypto" economy is the obvious risk that, if two activities of a certain economic proximity, or, if one prefers to put it another way, "potentially substituting each other", are subject and not subject to regulation, there could be a movement away from the regulated activity to the unregulated one.

This has generally been the case with all the unregulated activities known globally as "shadow banking". The fact is that, benefiting from the lack of regulation, or at least from the non-application of a large part of the regulation that does apply to other types of entities, even if they carry out similar activities, shadow banking has grown exponentially since the global financial crisis, so that what was considered at the time to be one of the causes of the crisis is once again becoming a real risk to financial stability.

Something similar can be said about economic activity in the "crypto" sphere. Moreover, there is an additional similarity between the two phenomena: both have been in some way "encouraged" by the lax monetary policy (low interest rates) followed since the global financial crisis by central banks around the world and then resumed (in the case of the ECB, "maintained") to mitigate the economic contraction that would follow the pandemic.

The quick rise of the "crypto" economy has, in addition, two other explanatory fundamentals of a certain "ideological" nuance:

First, and this is particularly noticeable in the mysterious origin and development of Bitcoin almost thirteen years ago now, the idea was to find an alternative to the global financial "system" (and I emphasize this word in particular) and all that it represented. A search that benefited from the reputational crisis suffered by the financial system because of the global financial crisis.

Secondly, the crypto world has also been favored by a certain "worship" of technology, ignoring the fact that behind all technology there is inexorably the hand of man, and his usual "biases". Consequently, these techno obsession led many to put more trust in the decisions of abstract entities and institutions than in individuals. Thus, to give an example, the "believers" —and so I dare to call them— in the Bitcoin put much more trust in blockchain technology than in the decisions of central banks. They believe, that, for example, a crypto system would mechanically avoid a politically motivated or simply inflationary monetary policy, such as the one that, by the way, has been in place until relatively recently.

This last comment shouldn´t be misunderstood. Personally, I cannot help but admire the innovation brought forward by distributed ledger technologies, and the opportunities they offer to "rebuild" on a completely new basis many financial activities and even business operations. In fact, I am personally much more confident in the transformative potential of a new crypto economy than on the capacity, building on "traditional" legal foundations, to recreate institutions, practices, and transactions to make them more efficient and secure.

This "marriage" between the new possibilities provided by these technologies and our most basic legal system —including, in the Spanish case, and as a common European example the civil code, commercial code and corporate legislation - is what is really missing so that this "crypto revolution" can take place, leading to the "tokenization" of part of the financial and non-financial instruments and assets that we use every day in our economic activities.

Coming back to crypto-assets and their necessary legal regulation, there is also another reason why an economic activity that was growing as fast as the new "crypto economy" should have been regulated: the protection of consumers and investors.

If there is one thing that history has proven time and time again, it is that any economic activity, and singularly any activity related to investment in assets (artificial or not), if left totally unregulated, ends up giving rise to abuses and frauds, especially harmful to less informed consumers and investors, because of the fundamental asymmetry of information inherent in financial services between the provider and the user.

Crypto-assets appeared just over a decade ago with the creation of Bitcoin (2008), coinciding with the global financial crisis. Since then, and until the significant correction that occurred a few months ago, the volume of crypto-assets in circulation has increased thirteenfold, according to estimates recently shared by the Bank of Spain[1].

It is important to note that, as the Bank of Spain[2], has also pointed out, transactions associated with crypto-assets without backing (i.e., excluding stable coins) represent more than eighty percent of the total, and are also the most volatile, which makes them especially dangerous for retail investors.

This exponential growth explains why regulators around the world have developed actions aimed at regulating activities related to crypto-assets, especially regarding their interrelations with the "traditional" financial system.

8.2. THE "CRYPTO WINTER"

After years of exponential growth, which increased during the hardest months of the pandemic, the change in interest rate policy by central banks following the high inflation caused by the war in Ukraine, and its effects on liquidity on a global scale,

[1] Banco de España. "Especial Criptoactivos". Informe de Estabilidad Financiera. Spring 2022. Existe versión inglesa?

[2] See previous foot note.

had an immediate effect on crypto-assets, giving rise to what has been called the “crypto winter”, characterized by the sharp loss in value of these assets, at the same time, the crisis of some of the most significant intermediaries in this field.

Part of what happened has to do with the traditional boom and bust cycle of financial bubbles stemming from the long policy of low interest rates and the abundant liquidity available. Bubbles that have been noted on different types of assets, such as real estate (in certain geographies), government bonds (?) and crypto-assets.

Another part, and perhaps the most worrying, has to do with the consequences derived from a regulation that has often limited itself more to alerting investors to the risks associated with investment in crypto-assets than to introducing a real regulation of the activity and the provision of services related to them. A lack of action from regulators that has resulted in some of the players that have operated in this field were far removed, in terms of their organization, procedures and internal controls, from what constitute minimum standards established for years in the traditional financial sector.

It is also possible that the recent weakness of the investment in crypto-assets has been influenced by the progressively greater demands that regulators have been placing on intermediaries with these assets from the point of view of preventing money laundering and blocking the financing of terrorism and from the fiscal point of view.

Finally, special vigilance on the crypto assets and transactions in order to apply the financial sanctions imposed on public and private entities, and on individuals, because of the Russian invasion of Ukraine, may also have had something to do with this significant correction which, as far as can be seen, is far from being completed, and further falls cannot be ruled out.

8.3. THE REGULATORS ‘RESPONSE

Aware of the risks, global, regional, and national regulators (including the CNMV and the Bank of Spain) have tried to alert consumers and investors to the risks inherent in this type of assets but, as indicated above, their success has been limited and both the types of activities and the volumes invested have been increasing at a strong pace.

But prohibitions are no substitute for substantive regulation of the activity, which is what is long overdue.

Regulators around the world were soon aware of the risks that crypto-assets could entail from the point of view of compliance with the legislation on the prevention of money laundering and the financing of terrorism and also for non-compliance with tax obligations, so that both regulations, following in the first case the recommendations of the Financial Action Task Force, the global anti-money laundering (AML) regulator evolved to create specific legal obligations in this area and, in particular, to make financial intermediaries providing services related to crypto-assets legally obliged to provide information to the authorities. This was followed by many regional and national supervisors. Amongst many others, this have been the case of the United Kingdom.

However, this initial limited approach is gradually being replaced by more ambitious approaches, such as the consultation launched in the United Kingdom by its Financial Conduct Authority (FCA) on the use of stable cryptocurrencies as a means of payment.

The Financial Stability Board (FSB) has also become aware of the importance of the problem and, after recognizing the importance of the MICA Regulation proposal[3] at the European level, to which we will refer below, has committed to the adoption of some international standards by 2023.

The starting point for this global regulatory action is to be found in the report on crypto-assets published by the FSB on October 11, 2022, which contains some proposals for recommendations (nine in total) on future global regulation, and on which comments have been requested and should be received by the time this work is completed (December 15, 2022).

The International Organization of Securities Commissions (IOSCO), within the scope of its competencies, has also initiated actions aimed at the publication of standards in 2023. To that end, two working groups have been set up, one led by the US Securities and Exchange Commission (SEC) on decentralized finance (DeFi), and another led by the FCA that would strictly concern crypto-assets.

While waiting for these global recommendations, there are many countries that have decided not to wait and to provide crypto-assets and related services with their own regulation, which is therefore fragmented and hardly coherent.

Thus, many countries have established in their legislation obligations for the mandatory registration of service providers related to crypto-assets, who must obtain a license or prior administrative authorization. These include Canada, the United States, Mexico, Chile, Argentina, Brazil, Japan, China, Thailand, India, Singapore, Australia, and South Korea, as well as the United Kingdom already mentioned. However, national regulations are very different, from the EU with the future MICA regulation establishing strong requirements for the service providers on crypto-assets and others as Switzerland and Japan with a much tolerant approach aimed to foster financial innovation.

The existence of international initiatives of such relevance as those mentioned in this paper can only be viewed positively, and it is to be hoped that, especially those promoted by the G-20 and the Financial Stability Board, on the one hand, and IOSCO, on the other, will give rise to a generalization of rules which, on the other hand, should be somewhat less heterogeneous than those we have at present. In this sense, it seems likely that the European MICA Regulation could serve as a reference model for this future regulation, since these international institutions have made positive assessments of the future standard.

The problem is that all these initiatives come with much delay, once millions of

[3] Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Markets in Crypto-assets and amending Directive (EU) 2019/1937. COM/2020/593 final.

people around the world have lost the investments they made in crypto-assets. It is true that these investors have been ignoring the recommendations made by regulators and banking and securities supervisors around the world for retail investors to refrain from investing in this type of assets, warning them of the risk of total loss of the investment and the absence of any type of coverage or protection similar to deposit guarantee funds or investment guarantee funds. But the losses inflicted upon these investors will not be marginal and it could have a significant impact on the credibility and reputation of financial regulators around the globe.

On the other hand, once these global recommendations are formulated, it will still take some time before they become mandatory rules in the different territories so that regulatory arbitrage will remain a real risk.

8.4. THE SPECIFIC EU CASE: THE "MICA" REGULATION PROPOSAL.

The European Union was soon aware of the need for this regulation and made progress in the drafting and processing of a regulation on crypto-asset markets, the abovementioned MICA Regulation proposal. After a long process in which the agreement of the different European institutions and players was necessary, the EU is now close to the approval of its final text[4], which would start the "countdown" for its entry into force.

8.4.1. SCOPE AND OBJECTIVES OF THE MICA REGULATION

It is important to bear in mind that this new regulation is somewhat complementary to other European rules that already regulate certain assets, such as financial instruments, regardless of the technology used. This is, above all, the case of the MIFID II regulation, which contains the current European regulation of investment services and ancillary services, and which would apply not only to "traditional" financial instruments but also to those financial instruments that use the new distributed registration technologies. The MICA Regulation was created to fill the existing gap because of the non-application of these current rules to other types of crypto-assets. A gap that made these crypto-assets the target of a growing investment by all types of investors, creating risks of different kinds.

Apart from the limitations of this new "MICA" regulation, which will be discussed later, the pace at which the regulation is being processed and, above all, its entry into force and effective application have been delayed far beyond what is reasonable, so that transposition will not take place until after 2024, when some of the risks inherent to crypto-assets will have already become a reality, as we are currently seeing on real time.

We are therefore faced with a regulation of limited scope, and which will be ap-

[4] La aprobación final ha sido nuevamente retrasada hasta el mes de abril de este año 2023.

plied in the territory of the Member States clearly belatedly. However, if we compare the situation in Europe with that in other parts of the world, the result is positive for our continent since, elsewhere, practically no legislation has been passed to regulate the economic activity surrounding crypto-assets.

This is bad news as this is a truly global activity, capable of rapid delocalization, and where regulatory fragmentation between the different regions does not make much sense, favoring regulatory arbitrage that, once again, will only harm consumers and investors.

According to the explanatory memorandum of the proposal, the future regulation has four general and related objectives:

a) The first objective is legal certainty. For crypto-asset markets to develop within the EU, there is a need for a sound legal framework, clearly defining the Regulatory treatment of all crypto-assets that are not covered by existing financial services regulation.
b) To support innovation. To promote the development of crypto-assets and the wider use of DLT, it is necessary to put in place a safe and proportionate framework to support innovation and fair competition.
c) To instill appropriate levels of consumer and investor protection and market integrity given that crypto-assets not covered by existing financial services legislation present many of the same risks as more familiar financial instruments.
d) To ensure financial stability. Crypto-assets are continuously evolving. The proposal includes safeguards to address potential risks to financial stability and orderly monetary policy that could arise from “stable coins”.

The MICA regulation starts, logically, by defining crypto-assets as “a digital representation of value or rights which may be transferred and stored electronically, using distributed ledger technology or similar technology” (art. 3. (2)

The proposal of the new regulation, not yet published in its final version at the time we are finalizing this paper, limits considerably its scope leaving outside the following types of crypto-assets, as defined in their respective regulation (art 2.2):

— financial instruments
— electronic money
— deposits
— structured deposits
— securitization

This limited reach seems a key provision to understand the true scope of the MICA Regulation. Crypto-assets that serve an equivalent purpose to financial instruments, electronic money, deposits, structured deposits and securitizations are not outside the scope of application of the MICA Regulation because they are not economically and legally relevant, which they indisputably are, but because in application of the principle of technological neutrality, regardless of the technology in each case used (or not used) instruments or assets that perform an equivalent economic function or represent risks that can be considered comparable, should be subject to the same regulation.

That would be the case, to use a meaningful example, of a bond represented through a "conventional" or "traditional" financial instrument, created without using any of the new technologies we have been referring to, that would be governed as regards its issuance and marketing by the same rules as a bond constituted in the form of a crypto-asset. This seems to be a coherent decision and one that places all these "financial" crypto-assets under the control of the relevant supervisors, of the markets and financial instruments and of the banks, where appropriate.

But this is not the only relevant limitation in the scope of the proposal: from a subject perspective, the Regulation does not apply either to the following entities and persons (art. 2.3):

- the European Central Bank, national central banks of the Member States when acting in their capacity as monetary authority or other public authorities,
- insurance undertakings or undertakings carrying out the reinsurance and retrocession activities,
- a liquidator or an administrator acting in the course of an insolvency procedure,
- persons who provide crypto-asset services exclusively for their parent companies
- the European Investment Bank
- the European Financial Stability Facility and the European Stability Mechanism,
- public international organizations

Again, a clarification is in order. The application of these subjective exclusions, combined with the objective exclusions referred to above, leads to the exclusion of such relevant assets as digital currencies issued by central banks, the now famous "CBDCs", from the scope of application of the MICA regulations.

These future digital currencies, unlike those issued by private actors, will be governed by their own rules in the same way as existing legal tender currencies.

Based on these relevant exclusions, the MICA Regulation does not establish, and it is important to understand this, a regulation for crypto-assets per se, but for certain services and activities related to them.

8.4.2 THE CRYPTO-ASSETS TO BE REGULATED BY MICA

Having made these necessary clarifications, we will now focus on the crypto-assets that do fall within the scope of application of the future MICA Regulation, and which would be those assets not issued by the entities excluded from the scope of application of the rule just listed, and which, in addition, belong to one of the following "families":

- Asset-backed token: Defined by the MICA Regulation (art. 3 (3) as "a type of crypto-asset that, in order to maintain a stable value, references the value of several legal tender fiat currencies, one or several commodities, one or several crypto-assets, or a combination of such assets".
- Electronic money token (or e-money token), art. 3 (4): "a type of crypto-asset the main purpose of which is to be used as a means of exchange and that purports to maintain a stable value by referring to the value of a fiat currency that is legal tender".
- Service token: a type of crypto-asset used to provide digital access to a good or service, available through decentralized registry technology (DRT) and accepted only by the issuer of the token in question.

With respect to these activities and services, the MICA Regulation establishes the following rules:

1. Transparency and information requirements in relation to the issuance and admission to trading of crypto-assets.
2. The authorization and supervision of crypto-asset service providers, issuers of asset-backed tokens and issuers of electronic money tokens.
3. The operation, organization and governance of asset-linked token issuers, e-money token issuers and crypto-asset service providers.

In addition to these "administrative" rules, so to speak, the Regulation also contains two other blocks of rules with a different, and very relevant, purpose, which will place the European regulation well ahead of that in force in other jurisdictions, such as consumer protection rules in relation to the issuance, trading, exchange and custody of crypto-assets and measures aimed at preventing market abuse, in order to ensure the integrity of crypto-asset markets.

These are undoubtedly rules of great importance, which, had they been in force and applicable, could have helped to avoid some of the events that have occurred in recent months in relation to the activity of certain crypto-asset-related service providers.

Having established the above, it is now necessary to know which are the services that, specifically, will be subject to the new MICA regulation. According to the list contained in Article 3, paragraph 9) of the Regulation, these are the so-called "crypto-asset services", which are the following:

a) the custody and administration of crypto-assets on behalf of third parties.
b) the operation of a trading platform for crypto-assets.
c) the exchange of crypto-assets for fiat currency that is legal tender.
d) the exchange of crypto-assets for other crypto-assets.
e) the execution of orders for crypto-assets on behalf of third parties.
f) placing of crypto-assets
g) the reception and transmission of orders for crypto-assets on behalf of third parties.
h) providing advice on crypto-assets.

Going further into the new European regulation, and beyond the first rules containing the definition of its purpose, scope and definitions, the Regulation establishes the regulatory requirements applicable to crypto-assets other than asset-backed tokens or e-money tokens, asset-backed tokens and e-money tokens (including "significant e-money tokens"), electronic money tokens (including "significant electronic money tokens"), and then sets out the rules on "authorization and conditions for the pursuit of the business of crypto-asset service providers", to complete its content with the provisions dedicated to preventing market abuse in relation to crypto-assets and strengthening the protection of consumers and investors.

The feeling that emerges from reading all these provisions, which we will briefly analyze below, is that the aim is to build a regime similar to that of regulated activities in the field of financial services and those providing services in this field, particularly investment services, avoiding the existence of an unregulated area of activity that would be dangerously close to that of regulated financial activity, although the existence of risks arising from contact between the two realities cannot be ruled out.

The regulation of crypto-assets other than asset-backed tokens or e-money tokens starts with the definition of "asset-backed tokens" and "e-money tokens" in Article 3(3) and (4) respectively of the MICA Regulation. These would thus be crypto-assets (i.e., as we know, digital representations of securities or rights which can be transferred and stored electronically using decentralized recording technology or similar technology) and which do not have the characteristics of asset-backed tokens or e-money tokens.

The Regulation introduces stringent requirements for the issuance of crypto-assets of this type, so that they may not be issued by issuers that are not legal persons, have prepared the relevant crypto-asset white paper (equivalent to a prospectus in other types of issues), have notified and published the white paper and comply with the obligations set out in Article 13 of the Regulation, which again are very reminiscent of those of investment service providers:

- act honestly, fairly, and professionally.
- communicate with the holders of crypto-assets in a fair, clear, and not misleading manner.
- prevent, identify, manage and disclosure any conflicts of interest that may arise.
- maintain all of their systems and security access protocols to appropriate Union standards.
- Act in the best interests of the holders of such crypto-assets and shall treat them equally, unless any preferential treatment is disclosed in the cryto-asset white paper, and, where applicable, the marketing communications.

Failure to comply with these conditions for carrying on the business will result in the issuers of crypto-assets being held liable.

In the case of asset-referenced tokens, the issuer shall obtain authorization from the competent authority of its home Member State to offer the tokens to the public or to apply for admission to trading on a crypto-asset trading venue. Such authorization may only be granted to legal persons established in the territory of the Union. Authorization shall not be required where the amount of the issue does not exceed EUR 5 million, or the equivalent amount in another currency, or where the issue is exclusively addressed to qualified investors and only qualified investors may hold the tokens.

Authorization is also not required where token issuers are already authorized as credit institutions.

Authorization is conditional upon compliance with the demanding requirements set out in Article 16 of the Regulation, which sets out in detail the content of the application for authorization to be submitted, including the requirement for a "legal opinion concluding that asset-backed tokens cannot be considered as financial instruments, electronic money, deposits or structured deposits".

These requirements are again reminiscent of those for investment services providers in such relevant aspects as good repute, knowledge, experience, lack of criminal record, organization, procedures and internal control, procedures, and systems for safeguarding security, in particular cybersecurity, mechanisms for handling complaints, etc.

Having established this initial requirement, the obligations are similar to those of the asset issuers discussed above, i.e., a crypto-asset white paper must be prepared and submitted for approval to the competent authority of its home Member State. The content of the white paper, detailed in Article 17 of the Regulation, builds on the content of the crypto-asset issuance discussed above, but adds new content, such as a detailed description of the issuer's governance arrangements, the asset pool, the custody arrangements for the pool assets, the investment policy for these assets, the nature and enforceability of rights and the complaints handling procedure.

Following the assessment of the application, the competent authorities shall decide whether to grant or refuse authorization within three months.

The obligations of issuers of asset-backed tokens are not exhausted by obtaining such authorization. The MICA Regulation also requires them to act honestly, fairly, and professionally and to communicate with token holders in a fair, clear, and non-deceptive manner, to inform them on an ongoing basis about the number of asset-backed tokens in circulation and the value and composition of the reserve assets, as well as the outcome of the asset audit and any event that significantly affects or may significantly affect the value of the tokens or the reserve assets.

The Regulation also contains rules concerning the complaints procedure and the prevention, detection, management, and disclosure of conflicts of interest.

Another of the areas in which the Regulation establishes relevant requirements is prudential. Thus, issuers of asset-backed tokens must always hold own funds of an amount equal to at least the greater of 350,000 euros or two percent of the average amount of reserve assets.

In addition to these own funds, there is a requirement to hold a separate asset reserve for each category of asset-backed tokens, which must be managed separately. To ensure the effectiveness of this reserve, the assets comprising the reserve must be held separately from the issuer's own assets, must be unencumbered, and not pledged, must be held in custody and must be readily accessible to issuers to meet redemption requests from token holders.

As is customary in such rules, the Regulation also contains provisions governing the acquisition of issuers of asset-linked tokens so that any acquisition of a qualifying holding that would enable ten, twenty, thirty or fifty per cent or more of the voting rights or capital, or that would enable the issuer to become a subsidiary of the acquirer, would be subject to a duty to notify the competent authority. The same obligation shall arise where a holding which gives access to voting rights or capital in the above-mentioned percentages is no longer held. After assessment of the notification made, the authorities may object or not object to the notification.

The Regulation contains a special regime applicable to "significant asset-linked tokens" which will be those where at least three of the following conditions are present: size of the client base of the promoters, shareholders of the issuer or any of the third party entities, value of the asset-linked figures issued, number and value of the transactions carried out with asset-linked tokens, size of the asset pool, importance of the cross-border activities of the issuer of the asset-linked tokens or interconnectedness with the financial system. This rating may also be voluntarily requested by the issuer of the asset-backed tokens.

One of the unique features of the Regulation in this specific case is the requirement for a remuneration policy that promotes sound and effective risk management and discourages the relaxation of risk rules.

The Regulation's regulation on electronic money tokens is based on the principle that no token may be offered to the public in the Union or admitted to trading on an electronic money platform unless the issuer is authorized as a credit institution, electronic money institution, complies with the requirements applicable to electronic money institutions and publishes a crypto-asset white paper.

The most important right that the Regulation gives to holders of e-money tokens is the right to have a claim against the issuer of the e-money tokens so that upon request of the holder, the issuer shall, at any time and at par, repay the monetary value of the e-money tokens, either in cash or by transfer.

Again, the issuer will be obliged to publish a crypto-asset white paper on its website.

The Regulation also contains specific provisions for "significant electronic money tokens", based on the same criteria already analyzed.

Just as relevant as the above is the regime established by the Regulation for the authorization and establishment of criteria for the exercise of the activity of crypto-asset service providers.

The principle, again, is that crypto-asset services may only be provided by legal persons having their registered office in a Member State of the Union that have been authorized as crypto-asset service providers. This authorization will be valid for the entire territory of the European Union and will allow the activity to be carried out on a cross-border basis without the need for a physical presence in the territory of the host state.

The European Securities and Markets Authority (ESMA) will be responsible for establishing and managing a register of all crypto-asset service providers.

The requirements for these providers are similar to those discussed above, although in the case of prudential requirements, it is stipulated that they shall always have prudential safeguards equal to at least the higher of the following:

(a) The amount of the minimum ongoing capital requirements set out in Annex IV of the Regulation depending on the nature of the crypto-asset services provided,

(b) one quarter of the previous year's fixed overheads, reviewed annually.

One of the most relevant provisions of the Regulation, in view of the events that have taken place in recent weeks, is that "crypto-asset service providers holding crypto-assets belonging to customers or the means of access to such crypto-assets shall take appropriate measures to safeguard the property rights of customers, especially in the event of the insolvency of the crypto-asset service provider, and to prevent the use of a customer's crypto-assets for its own account, except with the express consent of the customer". To this end, crypto-asset service providers shall promptly deposit the funds of any customer with a central bank or credit institution.

The Regulation is also concerned, as is usual in recent financial regulation, with the operational risks associated with outsourcing the execution of operational functions. Among many other obligations is the requirement to have an outsourcing policy in place, including contingency plans and exit strategies.

These "general" obligations are reinforced for particularly relevant services, such as the custody and administration of crypto-assets on behalf of third parties, the operation of a crypto-asset trading platform, the exchange of crypto-assets for fiat currency or exchange of crypto-assets for other crypto-assets, the execution of orders related to crypto-assets on behalf of third parties, the placement of crypto-assets, the reception and transmission of orders on behalf of third parties and the provision of advice on crypto-assets.

Once more, there is a strong sense that a "parallel" regime to MiFID II is being constructed for the provision of financial services related to financial instruments.

Also in this case, a regime is established for the acquisition of significant holdings of crypto-asset service providers.

The Regulation, as anticipated, also contains specific rules in relation to market abuse, establishing a regime for the communication of inside information, prohibiting the carrying out of transactions using inside information on crypto-assets to acquire them. In addition, unlawful disclosure of inside information and market manipulation as defined in Article 80 of the Regulation is prohibited.

Finally, the Regulation establishes a new architecture for the regulation and supervision of the matters covered by the Regulation based on the recognition of competences and cooperation between the European Banking Authority, ESMA and national competent authorities. Importantly, the European Banking Authority is attributed specific tasks in relation to the supervision of issuers of significant asset-backed securities and significant electronic money tokens, while the establishment of colleges of supervisors in relation to them is envisaged.

8.4.3. MICA: AN INITIAL ASSESSMENT

MICA Regulation will undoubtedly considerably improve the European legal framework for the issuance and provision of services related to crypto-assets. The biggest criticism that can be levelled is the length of time it will take to enter into force, considering both its lengthy processing and the delay in its effective implementation.

Despite its limitations, there is no doubt that, once it is implemented, Europe will have a framework of reasonable legal certainty that should allow the development of these activities, so it is difficult to understand why, once we have a regulation that, with its limitations, is more complete and ambitious than the one that is currently in force, it would take so long to implement it, It is therefore questionable why, once we have a regulation that, with its limitations, is more complete and ambitious than any regulation any other country has managed to articulate, the timeframes for approval, entry into force and effective application of the regulation have not been speeded up, thereby losing the advantage derived from the rapid application of a homogeneous regulatory standard in the European Union.

In any case, if we look at recent EU legislative action, it seems reasonable to distinguish between three issues which, in my opinion, are very different in terms of their scope and inherent risks: (i) the emergence of crypto-assets derived from the use of DLT technologies and, above all, blockchain, which should be seen as a positive innovation, in need of a framework of protection and legal certainty to enable their development, (ii) the world of crypto-currencies, in which a distinction should be made between "stable coins" and others, and over which there is doubt as to whether, once the third form (not strictly a crypto-asset, as defined by the MICA Regulation) appears, CBDCs will remain a legally accepted alternative or whether, given their risks, their use could be limited (and even banned), as has already happened in some national markets, and (iii) the discussions and preparatory works for the future creation of a digital euro.

The European Union has made great progress in all three areas, so that the proposed MICA Regulation is currently at an advanced stage of processing. Once political agreements have been reached between the European institutions, it should lead to its definitive approval in the near future. The European Central Bank is also making progress in its analysis of the conditions to be met, if necessary, by a future digital euro, which would have all the characteristics of a CBDC and would act as a "digital reverse" of the current euro and finally, as we are about to analyze in the next chapter, there is also a relevant pilot based on DRT technology.

8.5. A COMPLEMENTARY INITIATIVE: THE EUROPEAN PILOT OF MARKET INFRASTRUCTURES BASED ON DRT TECHNOLOGY

The third area where noteworthy progress is being made concerns the use of distributed registration technologies.

An agreement has recently been reached between the Council and the European Parliament, already endorsed by the Permanent Representatives of the Member States to the European Union, on a pilot scheme for market infrastructures based on decentralized registration technology (DRT).

This "pilot" regime specifies the requirements to be met to obtain authorizations to operate market infrastructures using this type of technology, sets out the financial instruments based on this technology that can be traded and details the instruments for cooperation between operators of market infrastructures based on DRT, the competent national authorities and ESMA.

Specifically, this DRT pilot scheme aims to test the development of the European trading, clearing and settlement infrastructure for financial instruments based on this technology.

This pilot scheme will have an initial duration of three years, after which the Commission will conduct an evaluation process on the costs and benefits achieved with the initiative to decide on its continuation or termination.

8.6. OTHER RECENT REGULATORY INITIATIVES TO BE CONSIDERED

8.6.1. ANTI-MONEY LAUNDERING REGULATION

Aligned with MICA, the EU has also reached provisional agreement on a new ~~bill~~ regulation? aimed at applying Anti-Money Laundering considerations to the emerging crypto market. The agreement extends the Financial Action Task Force's 'travel rule' (already existing in traditional finance) to cover transfers in crypto-assets. Under the EU's bill:

- Information on the source of the asset and its beneficiary "must travel" with the transaction and be stored on both sides of the transfer. Crypto asset service providers must be able to provide this to national regulators, if requested. However, personal data (including name, addresses) should not be sent if there is no privacy guarantee
- There will be no minimum threshold nor exemptions for low-value transfers (as originally proposed)
- Crypto Assets service providers must verify that crypto-asset beneficiaries are not subject to any restrictive measures or sanctions
- For transfers of more than €1000 between a hosted and un-hosted wallet, crypto assets service providers will need to verify that these are owned by the same customer

Aligned with this EU initiatives, the UK Treasury has published a response to its consultation on Amendments to the Money Laundering, Terrorist Financing and Transfer of Funds Regulations. This also aims at ensuring application of the 'travel rule' to crypto-assets.

However, both regimes (EU and UK) are not the same, and unlike in the EU in the UK:

- A *de minimis* threshold of €1.000 is included (which may be changed to GBP at a later date)
- Instead of requiring the collection of beneficiary and originator information for all un-hosted wallet transfers, crypto-asset businesses will only be expected to collect this information for transactions identified as posing an elevated risk of illicit finance
- UK Treasury has decided against requiring verification of information collected regarding un-hosted wallet transfers

These measures were finally approved as amendments to the previous Anti-Money laundering legislation through the Terrorist Financing and Transfer of Funds (Information on the payer) Regulations 2017 Statutory Instrument 2022 that mandated the crypto travel rule. New regulation will be fully enforceable from next 1 September 2023.

8.6.2. NEW BASEL RULES ON PRUDENTIAL TREATMENT OF CRYPTO-ASSETS

A new relevant trend on banking regulation and supervision is related to the supervisory approach to the crypto-assets world from a prudential perspective.

In this respect, the Basel Committee for Banking Supervision (BCBS) has published its second consultation on the prudential treatment of banks' crypto-asset exposures noting that, while the crypto-asset market remains small relative to the size of the global financial system, its growth has the potential to undermine financial stability.

It could be useful to remind that the BCBS had originally proposed to categorize assets into Group 1 (assets that fully meet a set of classification conditions), including tokenized traditional assets (Group 1a) and crypto-assets with effective stabilization mechanisms, i.e., "stablecoins" (Group 1b) and Group 2 (assets that fail to meet any of the classification conditions i.e., unbacked crypto-assets) — with the latter being subject to more conservative capital treatment.

Under the second consultation, this categorization has been updated and further segmented to reflect additional nuances — including an infrastructure risk add-on, recognition of hedging, and the application of liquidity rules. However, not surprisingly given recent market events, the BCBS continues with its overall conservative capital treatment of crypto-assets and has introduced a further requirement limiting a bank's total exposures to Group 2 assets to 1% of Tier 1 capital

In the current market context, is unlikely the BCBS to change this conservative approach.

8.7. CONCLUSION

To summarize, we believe that global regulation of crypto-assets is urgently needed to foster the development of financial innovation and the exploitation of the opportunities arising from the use of DLT technologies with the necessary legal certainty, to preserve financial stability by avoiding risks arising from the high volatility that many of these assets have shown, and, above all, to protect the less informed consumers and investors, who may invest in these assets without being fully aware of their peculiar - and high - risks and the uniqueness of their legal regime compared to that of other financial products and instruments.

We thus fully share the conclusions recently reached by IMF capital markets deputy director Aditya Narain and assistant director Marina Moretti when, in a recent work5, they stated that "crypto-assets have moved from being "niche products" to becoming speculative investments, hedges against weak currencies and payment instruments... and this, together with the recent failures of cryptocurrency issuers, exchanges and hedge funds have "added impetus to the drive to regulate".

We are confident that the initiatives recently addressed by the FSB and IOSCO and which, in principle, should lead to the adoption of global recommendations on the use of crypto-assets in financial services this year (2023) could lead to the adoption of a new regulation that can provide coverage for this type of activity while reconciling innovation in financial matters, and the exploitation of the advantages derived from the use of new DLT technologies with the necessary legal certainty and protection for consumers and investors.

In this respect, the MICA Regulation, although limited in scope, as has been explained, may constitute a good guidance for future global regulation.

[5] Narain, A. and Moretti, M. "Regulating Cryto. The right rules could provide a safe space for innovation". Finance&Development. IMF. September 2022. Pages 18-19.

9. PRUDENTIAL TOOLS & TRANSITION RISKS IN THE EU: CAN THE TWO BOXES BE TICKED SIMULTANEOUSLY?

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ABSTRACT

Much has been written on how banks should manage climate-related and environmental risks and how financial supervisors should measure and oversee this process. With the global challenge that climate change brings, financial regulators and supervisors across the globe are consistently taking swift and decisive steps to tackle these risks. First, authorities set the minimum standards that banks and other financial institutions should follow when managing climate risks, and then banks flesh out plans to meet those expectations. Moreover, authorities have started to conduct stress tests where they analyze potential impacts on the financial sector in various climate scenarios. Regulators are also updating their supervisory methodologies to ensure that they account for climate risks and new disclosure requirements are being implemented. However the approach to the regulation and supervision of climate risks has so far been fundamentally qualitative. In this paper, we examine the feasibility of setting out quantitative requirements for dealing with climate risks. In particular, we discuss the green asset ratio, the possible introduction of climate-sensitive capital requirements and the main features of the future climate transition plans for the banking sector.

9.1. INTRODUCTION

The transition to a greener economy is a pressing need worldwide. The financial, specifically the banking, sector faces a huge challenge, as it will need to mobilize extremely large amounts of funding in the coming decades towards decarbonizing the economy. Banks, insurers, and other financial intermediaries are already developing the instruments required to facilitate the transition to a less carbon-intensive economy, including through the issuance of green loans, bonds, insurance policies, and investment funds. Financial institutions should be able to channel financial flows towards less carbon-intensive activities. Governments and other public and private institutions are rushing to put the necessary conditions in place to enable the development of a green financial market, such as preparing a green taxonomy, regulations for the issuance of green bonds and developing green labels.[1]

Nevertheless, the transition to a less carbon-intensive economy also poses significant risks for the financial sector. Banks and other financial institutions are increasingly exposed to physical risks, whether acute or chronic, that climate change is already giving rise to and are especially exposed to the transition risks that regulatory (carbon taxes), social or technological changes may bring. The impact of these risks on the banking sector may be direct, but are expected to be mostly indirect. Borrowers may see costs rise or revenues shrink due to transition and physical risks negatively impacting their affordability and therefore increasing the credit risk to which banks are exposed. Effectively, climate risks are not considered risks *per se,* but material drivers for other risk categories (credit, market, operational and liquidity).

There has been a global approach to climate-related risk since its onset. The establishment of the Network for Greening the Financial System (NGFS) in late 2017 sought to connect prudential supervisors and central banks worldwide to develop common responses to the prudential challenges raised by climate related risks. The NGFS has issued a wide range of documents that discuss and make recommendations on this topic. Notably, the Basel Committee on Banking Supervision (BCBS) has recently issued the final version of its standards on how banks will be expected to manage climate financial risks,[2] as well as how supervisors will be expected to conduct their review. The principles issued by the Basel Committee reflect how banks should integrate the management of these risks into their business, how they should govern them, and particularly, the risk management standards that banks should apply to them. They include the need to express a bank's climate risk appetite, to engage in scenario analysis and stress testing, and to define proper policies and procedures to identify, measure, manage, control, and report these risks.

In the EU, regulators and supervisors are at the forefront of the efforts to ensure the sound management and supervision of climate-related risks. The European Central Bank (ECB) issued its own Guide on the management of climate risks in late 2020,[3] and other European supervisors set their standards on climate risk management even ear-

[1] Such as systems for measuring the energy efficiency of buildings or vehicles.

[2] "*Principles for the effective management and supervision of climate financial risks*" (BCBS, June 2022). The document lays out 18 principles, 12 applicable to banks and 6 to banking supervisors.

[3] Guide on climate-related and environmental risks, that fleshes out the expectations relating to risk management and disclosure of these risks.

lier than this.[4] Some supervisors have already undertaken the horizontal examination of the banks' practices to meet the standards set by supervisors.[5] Regulators have introduced new prudential disclosure standards that address climate risks.[6] Furthermore, banking supervisors have engaged in both top-down and bottom-up climate stress test exercises, where they have tested the resilience of the banking sector in hypothetical scenarios of heightened transition and physical risks.[7] Most supervisors are currently integrating the assessment of climate risks into their regular activities. To this end, they are in the process of updating their supervisory methodologies,[8] or undertaking direct activities, such as thematic horizontal reviews and even on-site inspections focused on climate risks.

As explained above, supervisory activities targeting climate risks are expected to remain intensive in the coming years, continuing to be identified as a priority in the foreseeable future.[9] Huge efforts have already been undertaken by both supervisors and banks, and, as a result, they have made significant progress in understanding, measuring, managing, and supervising climate risks. Among other issues, banks are considering climate aspects in their business strategies, designing sound governance structures and actively measuring the carbon intensity of their clients' activities, to understand both the carbon intensity itself and how to translate this into relevant risk parameters.

Nevertheless, most of the requirements to date have been largely qualitative and principle-based. Similarly, the current geopolitical scenario has increased pressure on banking regulators and banks to accelerate the transition to an economy that relies less on burning fossil fuels. To this end, it is important to understand how other innovative instruments could feasibly facilitate this transition process. In this article we explore three such tools that may play a role in the banking sector facilitating the efforts to

[4] See BaFin (2019) "*Guidance Notice on Dealing with Sustainability Risks*"; or DNB (2019) "*Integration of climate-related risks into banks' risk management*"; or the PRA's "*Policy Statement on Enhancing banks' and insurers' approaches to managing the financial risks from climate change*" (PS 11/19).

[5] See ECB Reports on "*The state of climate and environmental risk management of the banking sector*" (November 2021); "*Supervisory assessment of institutions' climate-related and environmental risk disclosures*" (March, 2022) or, the more recent, "*Good practices for climate-related and environmental risk management*" (from the observations of the thematic review on climate risks) (November 2022). Other authorities have also disclosed their state of management of climate-related risks. See for example, the National Bank of Hungary's Green Finance Report.

[6] A key development was the European Banking Authority (EBA) Implementing Technical Standards on ESG Risks under Article 449a (January 2022). These standards will force banks to disclose qualitative and quantitative information on climate-related risks from early 2023, including quantitative information on climate transition risks and physical risks. Banks will also be required to disclose their green asset ratio (GAR).

[7] Notably, the 2022 ECB Climate Stress Testing.

[8] See EBA "*Report on management and supervision of ESG risks for credit institutions and investment firms*" (EBA/REP/2021/18), where it suggests approaches to integrate the assessment of these risks into the SREP supervisory system.

[9] For example, the Single Supervisory Mechanism (SSM) has identified as one of its three priorities for the 2022-2024 cycle to ensure that emerging risks are tackled, which includes the exposure to climate-related and environmental risks.

greening the economy: (i) the introduction of a disclosure regime for the green asset ratio (GAR), (ii) the introduction of mandatory carbon transition plans for the banking sector, and (iii) the potential reduction of the capital requirements for green assets (green supporting factor).

These three tools share some common features. First, their main goal is to encourage banks to act as accelerators for the transition process, leveraging their stewardship role to help their clients with the funding and further assistance they may need to make their business and economic activities less carbon-intensive. Therefore, the tools are primarily non-risk based. Second, despite their nature, they can also contribute to the mitigation of the transition risk for banks, as greener assets are less exposed to this type of risk. Third, these measures entrust banks to some degree with incentivizing their clients to make their activities more sustainable and to help countries meet their carbon emission targets, as expressed in the National Determined Contributions (NDCs). Fourth, they can also contribute to heightening other risks. Above all, these measures can interfere with the prudential framework, setting incentives for banks to increase their green assets at the expense of other considerations, such as their risk profile.[10] As a result, the risk of effectively implementing credit-guided approaches may not be negligible. When credit is guided, the allocation of capital by the financial sector is not strictly driven by risk-reward considerations, but also by other political, social, or environmental criteria, having a distorting effect on credit availability and pricing. This risk is amplified by the potential assumption, without a clear scientific base, of a "green factor" or "green risk differential" whereby green assets are less risky than non-green or brown ones. Use of these tools also raises questions over the role of the financial sector as some of them can force banks to overextend from financial intermediation and maturity transformation to become stewards or even supervisors of their borrowers' and clients' commitments in their transition to a greener economy.

9.2. THE GREEN ASSET RATIO (GAR)

The first tool to be discussed is the mandatory disclosure of the GAR, that has been already introduced for many European banks through article 8 of the European Taxonomy Regulation.[11] GAR mechanics are theoretically simple: banks[12] should es-

[10] There are studies showing that mortgage loans for energy efficient homes bear less risk of default than less energy efficient ones (to name a few: P. Zancadella, P. Bertoldi, B. Boza-Kiss (2018), "*Energy efficiency, the value of buildings and the payment default risk*", JRC Science for Policy Report; S. Næs-Schmidt et al. (2016), "*Do homes with better energy efficiency ratings have higher house prices?*", Copenhagen Economics (2021) "*Prudential treatment of green mortgages: Summary and Recommendations*"). Nonetheless, the evidence for other portfolios (i.e. corporate or SME loans) is still to be produced.

[11] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (the "EU Taxonomy").

[12] Banks will not be the only entities required to disclose their GAR, but the specific nature of the banks'

timate and disclose the proportion of their assets aligned with the EU Taxonomy. In other words, how many of their assets are green, according to common EU criteria. *Ceteris paribus*, the higher the indicator, the higher the contribution that a bank is making to economic sustainability.[13] Importantly, the GAR does not include any specific minimum requirement or threshold, and therefore it intends to operate through investor and peer pressure. As economic agents increase their efforts to adapt their business models and activities to an economy that requires lower carbon emissions, it is expected that banks will be able to report progressive and systematic increases in their GARs. Once the end of the transition approaches, and the targets of the Paris Agreement are closer to being met, GAR reported levels will hypothetically be closer to 100%.[14] At that point GAR disclosure will no longer be required, as its goal will have been fulfilled.

The periodic disclosure of the GAR will help to give investors and other stakeholders a sounder understanding of the alignment of the banks' portfolios to the EU Taxonomy, enabling them to conduct benchmarks and therefore identify outlier institutions. Investors should be able to quickly get a snapshot of how taxonomy-aligned and therefore sustainable, the asset portfolio of the bank is. Disclosing GAR will incentivize banks to renew their efforts to green their portfolios. Although not a prudential tool, this may also contribute to mitigating transition risks for the banking sector.

GAR calculation and disclosure is, above all, underpinned by the existence of a single taxonomy in the EU. A single definition of green assets creates an even playing field for banks, investors and other stakeholders to rely on when benchmarking banks.[15] In this regard, the GAR seems an excellent tool to facilitate the transition to a less carbon-intensive economy: easy to implement, based on a common framework, and transparent. Thus, GAR disclosure could become an effective yardstick for assessing the progress that each bank is making in greening its assets.

Nonetheless, the situation is not that straight-forward, as there are many hurdles that should be removed to ensure the GAR is consistent, comparable to other measures and relevant.

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activities and business model prompted the European Commission to delegate the method of calculation to the EBA, which, unlike for other legal entities subject to these disclosure requirements, is based on assets and not on revenues.

[13] The EU Taxonomy set out six targets, therefore it goes beyond climate change mitigation and adaptation, also covering other criteria such as reducing air pollution, preserving biodiversity and the transition to a more circular economy. Therefore, the assets may not only be identified as green for contributing to climate change mitigation or adaptation. In addition to making a significant contribution to any of the six environmental goals, an activity should not do significant harm to any of the other objectives and meet the minimum social safeguards.

[14] A 100% level may sound unrealistic, as a bank may always need to provide funding for specific economic activities that cannot be fully aligned with the defined taxonomy (e.g. specific fossil fuels).

[15] Against an alternative scenario where banks disclose their own definition of green assets based on their own criteria. In these cases, comparability and standardization is simply not possible, and greenwashing risks are not negligible.

9.2.1. EXCLUDED AND INCLUDED ASSETS

The regulation breaks down the assets into two categories: assets which are eligible for the GAR and those which are not. Eligible assets are those that should be included at least in the denominator of the indicator. Those that are not GAR-eligible are some of those issued to some counterparties (sovereigns, central banks and specific supranational institutions) and assets that are held for trading. In principle, all other financial assets are GAR-eligible, which means that they should be disclosed by banks.

9.2.2. COVERED ASSETS EXCLUDED/INCLUDED IN THE DENOMINATOR (GAR ASSETS)

There is a second breakdown of assets. From the non-excluded assets or GAR assets, banks are required to break down the assets that are only included in the denominator of the indicator (those for which it is expected that the bank will not have sufficient acceptable evidence of alignment with the taxonomy) and those included both in the numerator and denominator, which largely includes assets for which banks should be able to prove alignment with the taxonomy, once the sectorial criteria has been defined by the European Commission.

Among the first group, there are the exposures towards the non-financial corporates that are not subject to the disclosure requirements under the Non-financial Reporting Directive (NFRD).[16] This group includes both the bulk of the EU's SMEs but also the exposures to non-EU non-financial corporations.[17]

Under the second group (covered in the numerator and denominator) banks should report exposures to financial corporations, to EU non-financial corporations subject to disclosure requirements in accordance to NFRD, but also exposures to households where the bank can assess its alignment with the taxonomy (fundamentally mortgages, housing and vehicle loans), and exposures to local governments.

9.2.3. TAXONOMY ELIGIBLE AND NON-TAXONOMY ELIGIBLE AND ALIGNED AND NON-ALIGNED GAR ASSETS

For the GAR assets covered in the numerator and the denominator, the bank will be expected to break down the assets that belong to sectors that have been covered by the taxonomy (taxonomy eligible sectors) and those that have not. Finally, from the tax-

[16] Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups.

[17] The group also includes other assets such as derivatives, interbank loans, cash and other assets such as commodities or goodwill.

onomy eligible assets, the bank should report those assets that are taxonomy-aligned, meaning those assets that meet the technical screening criteria for the relevant sector.

The GAR will be calculated by dividing the taxonomy-aligned assets from GAR assets. The calculation methodology raises a paramount question: banks with a portfolio composition that overweights assets that are included in the denominator but excluded in the numerator will systematically report lower GAR levels and they will not be able to upgrade the GAR of these portfolios. This will mainly affect banks with material portfolios in third countries or significant lending to SMEs and consumer loans. In these cases, the GAR may effectively encourage banks to not only expand their sustainable loans, but also to deprive other segments, such as SMEs, of the funding that they will also need for their operations.

To address this issue, the GAR has been complemented with an additional indicator, the Banking Taxonomy Alignment Ratio (BTAR), where banks are allowed to publish how specific exposures that are excluded from the GAR numerator are aligned with the EU Taxonomy; the most important exposure categories included in the GAR denominator but excluded from its numerator are the non-EU non-financial corporates and the EU non-financial corporates not subject to the disclosure obligations under NFRD. The rationale for introducing this ancillary disclosure measure is twofold: (i) to provide valuable information to help investors understand the differences in GAR-reported values across banks, especially when they are explained by the banks' business models rather than the sustainability of their activities, and (ii) to seek to counterbalance the potential negative effects of excluding specific exposures from the denominator on the influence that banks may have on these borrowers.[18] In this manner, the BTAR can also operate as an incentive for banks to intensify their data-gathering efforts for these clients, creating a virtuous cycle for the transition to a less carbon-intensive economy.

Still, the effects on banks of the mandatory disclosure of GAR may not be easy to ascertain. Investors and stakeholders singled out as not doing their fair share for environmental sustainability and climate change mitigation and adaptation may effectively push banks towards changing their business models. In an era where stakeholder capitalism is a key topic in every bank's boardroom, this may lead to an uptick in banks' risk appetite towards specific segments of the green lending market,[19] which in turn may feed into overfunding for specific sectors at the expense of others. This could potentially feed into dangerous green bubbles, where banks have strong incentives to provide loans based just on how aligned a loan might be with the taxonomy. Similarly, precisely these incentives can deprive key economic sectors from the funding they need to decarbonize their activities. Moreover, although less likely, the pressing need to disclose higher GAR values may push some financial institutions to the limit, leading to green-

[18] As these borrowers are excluded from the GAR numerator, banks may have fewer incentives to help their clients' activities to become more taxonomy-aligned and therefore, more sustainable.

[19] In particular, those that represent assets that can be reported both in the numerator and the denominator (the taxonomy-aligned assets).

washing risks, especially in a context where the data generated by borrowers may still not be of the highest quality. Another important question for banks' risk management may be how they will make the green asset ratio compatible with other risk indicators they will need to monitor and manage within their risk appetite, especially those directly related to their portfolios' carbon footprints. Finally, the existence of a mandatory disclosure of GAR only in Europe may prejudice the level playing field when comparing with credit institutions from any other part of the world.

In any case, the full introduction of the GAR in 2024 will represent the best opportunity to test its effectiveness as a transition-enabling tool and its potential interference with the prudential framework. Potential improvements in the calculation and disclosure mechanisms may be warranted in the future.

9.3. CARBON TRANSITION PLANS

Carbon transition plans are also currently under discussion in the new EU regulatory package (CRDVI),[20] which also delegates the development of specific guidelines on how supervisors should review carbon transition plans[21] to the EBA. This initiative could potentially strengthen the banking sector's potential influence in reducing the carbon footprint of the economy. Conceptually, banks will be required to define, on a consolidated basis, their targets for the carbon intensity of their activities in a manner that is at least aligned to the targets under the 2015 Paris Agreement. The targets will be complemented with the actions that banks will be expected to implement to secure them and with the policies, procedures and infrastructure required to gather and manage the large amount of data that is required for the calculation. The plans are expected to be risk-based, and therefore, banks will need to test their targets against different scenarios, where decarbonization needs may become more acute. The plans will be reviewed by the prudential supervisor in a traditional manner, as happens nowadays with other similar processes.[22] The supervisor may provide feedback to the bank and

[20] The current article 76(2) of the Draft CRDVI includes a provision according to which "*Member States shall ensure that the management body develops specific plans and quantifiable targets to monitor and address the risks arising in the short, medium and long-term from the misalignment of the business model and strategy of the institutions, with the relevant Union policy objectives or broader transition trends towards a sustainable economy in relation to environmental, social and governance factors*". Article 87a(4) includes a mandate to the supervisors to assess these plans "*competent authorities should assess and monitor developments of institution practices concerning the environmental, social and governance strategy and risk management, including the articles to be prepared in accordance with article 76*".

[21] The article 87a(5) explicitly mentions that "*EBA shall issue guidelines (...) to specify: (...) (b) the content of the plans to be prepared in accordance with article 76, which shall include specific timelines and intermediate quantifiable targets and milestones, in order to address the risks from misalignment of the business model and strategy of institutions with the relevant policy objectives of the Union, or broader transition trends towards a sustainable economy in relation to environmental, social and governance factors*".

[22] As it is currently the case with the Internal Capital Adequacy Assessment (ICAAP) and its funding and liquidity version (ILAAP) and the Recovery Plans (RPs) to name some examples.

may integrate the assessment of the soundness of the carbon transition plans into its regular supervisory assessment.

These carbon transition plans are still at a very nascent stage. Nevertheless, there are several key questions on how these plans should be prepared. Most significant are those related to: (i) target setting, (ii) data availability, and (iii) the role in the broader supervisory framework.

A pertinent question is: what key issues should inform a bank's decision when determining its targets for carbon reduction? A domestic bank may have a bank-neutral strategy to ensure that the carbon intensity of its portfolio is in line with the international commitments of its country. In other words, that it is in line with the National Determined Contributions (NDCs) and therefore using the carbon targets, including intermediate ones, to inform its own decarbonization targets. Nonetheless, a bank may be more ambitious than its country, and therefore may want to build up its carbon net neutrality (or even negative contribution) in an accelerated way. A bank may decide to do this to signal an unwavering commitment to climate change mitigation or maybe to reduce its exposure to the transition risks stemming from it. Banks with more ambitious carbon transition plans will undoubtedly accelerate the greening of their borrowers' activities but may also increase transition risks for the rest of the economy, particularly if this muted appetite for transition risks becomes commonplace across the banking sector. Although competition and market forces are likely to balance these tensions, this question remains a very valid one.

Target-setting is also likely to be challenging for other reasons. First, how the setting of targets is to be carried out. Consistently with the time horizon of climate change, banks will be required to set decarbonization targets for the short, but especially for the medium (i.e. 2030) and long term. There is a well-known principle: the longer the projection period, the less accurate the targets become; long-term targets are more likely to work as programmatic or guiding principles rather than for effective target management. Banks will be expected to pay significant attention to medium-term and long-term targets. Second, how banks should approach the target setting is not completely clear. Even when the targets follow a top-down approach, their credibility will force banks to cascade those targets down to specific portfolios and industries, and ultimately, to the customer level. Third, banks should break down their targets on a country-by-country basis if they engage in cross-border banking activities, as the level of ambition can significantly vary across countries. Fourth, at least at the first stage, setting targets by scope can help address data availability problems regarding *scope 3* emissions.

As always, the elephant in the room concerning carbon transition plans is the availability of sufficient data to support the credibility of the targets and the actions arising from them. It is well known that current data is still quite limited. Among other aspects, not all companies will have to disclose their own emission data, as, for example, SMEs are not subject to these requirements. Second, banks are progressively migrating from emission data based on financial indicators (financial proxies) to emission data based on physical activities. These two approaches may not result in fully comparable results.

Third, data on the *scope 3* emissions of clients is increasingly being retrieved, affecting the calculations of banks. Fourth, banks operating in different jurisdictions can face additional difficulties, as less data is available in non-EU countries. Finally, the usage of different proxy mechanisms is likely to result in the low comparability of the information on emissions across the banking sector.[23]

One key part of the carbon transition should be the measures and actions (decarbonization measures) that banks will intend to adopt to achieve their targets. The changes to banks' credit underwriting standards and credit risk appetites should ensure that the carbon intensity of their loan portfolios is gradually reduced. Among other aspects, banks may more actively target high-carbon-intensity clients without sufficiently detailed transition plans, as the credit risk appetite for high emitters or late adopters is likely to wane. Banks with material trading portfolios may also consider the carbon intensity of their trading positions. But decarbonization measures will also affect the carbon intensity of banks' own economic activities, including, for example, improvements in the energy efficiency of their own buildings, reduction in business travel, increased usage of renewable funding sources or migration towards less carbon-intensive data-processing capabilities (i.e. through cloud computing). Last but not least, banks may also engage in transactions that can capture carbon emissions, either by financing the acquisition of new technologies that facilitate carbon capture or by using the available carbon sinks (i.e. tree-planting).

Banks will be expected to define different pathway scenarios for defining and testing their targets. Scenario analysis; examining different pathways of the transition to a less carbon-intensive economy, could be a useful tool for target-testing purposes.

Whether or not these plans should be disclosed is an important question. If banks are forced at least to disclose the different decarbonization targets, peer pressure may trigger additional requests for banks to take further action. But perhaps at the current stage, where there is still a question around the data comparability issue, disclosures by banks may be counterproductive, as lack of standardization and data reliability is likely to hamper the credibility of the plans.

A final question concerns the role of supervisors when assessing the carbon transition plans and how this new requirement can be materialised without imposing an unjustified and costly bureaucratic additional procedure. A truly risk-based approach should focus on assessing how banks manage their transition risks stemming from climate change. This may involve ascertaining the target-setting process, the data quality, the development and usage of proxies, and particularly the risk-management actions taken by banks. Moreover, as these plans will flesh out the targets and actions to mitigate transition risks, they might become a key input to understanding the exposure and management of climate risks by the bank.

[23] As indicated by supervisory experience, the measurement of the emissions may result in significant differences among banks, raising questions on the reliability of the quantification of the emission data.

9.4. THE DEBATE AROUND CAPITAL REQUIREMENTS: GREEN SUPPORTING FACTORS

One of the key questions in the prudential treatment of climate risks is around using the capital requirements regime to accelerate the transition to a greener economy. To date, two main approaches have been broadly discussed.

9.4.1. GREEN SUPPORTING FACTORS VS BROWN PENALIZING FACTORS

Lively and intense discussions on how to integrate climate-related risks into the capital framework are commonplace. The main questions are on whether the capital requirements should be amended to reflect the climate-related risks and, if this is the case, whether the amendments should have the broad goal of encouraging the transition to a less carbon-intensive economy or, alternatively, if they should exclusively target the capture of climate risk factors.

At an international level, the Basel Committee has not shown any willingness to make any changes to the Basel III framework, and in its Principles document it points to the Pillar 2 of the framework as an already available mechanism through which, by using ICAAP or stress testing, banks and supervisors can incorporate climate risks into their prudential capital requirements. But it is probably in the European Union where the debate is more vigorous, as measured by the numerous papers, conferences, and analytical studies. Crucially, the EBA has been mandated under the European regulations[24] to assess whether prudential treatment for assets associated substantially with environmental and/or social objectives would be justified.[25] Other authorities and private organizations have also provided their views on the matter.[26] Most opinions point out the complexities of making the main features of the climate risks compatible with the capital requirements regime. The significantly longer time horizon for these risks, the uncertainty surrounding them, the lack of available data and evidence of the performance of these risks and their non-linearity make them ill-suited to risk-based Pillar I treatment. The expected materialization of these risks only in the medium to long term raises questions about the time horizon of the Pillar I requirements, that typically seek to protect the bank against unexpected losses in one year. Moreover, the lack of climate-risk loss databases makes any exercise to quantify capital requirements challenging and unavoidably based on scenario analysis.

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[24] Article 501(c) of Regulation (UE) 575/2013 (CRR) and article 219 of Regulation 2019/2033 (IFR).

[25] The European Commission's proposal for amendments to CRR (CRR3), clarifies that the EBA should also examine the prudential treatment of exposures subject to environmental and/or social impacts.

[26] See, for example, the Bank of England's Prudential Regulation Authority, "*Climate-related financial risk management and the role of capital requirements*" in 2021, that resulted in a Climate Conference in October 2022. The Institute of International Finance, a private organization that represents banks across the world, also extensively discussed their position on the matter in July 2022.

In this context, other non-risk based approaches are possible. In principle, two options are available. The first, and most popular, is to define lower risk weights for green or otherwise environmentally-friendly assets. The second concerns the increase in risk weights for those assets that are identified as "brown" or hat carry significant transition risks. In this article, we focus on green supporting factors, as they are broadly considered more viable than the brown penalizing factors.[27] Several private and public institutions[28] have advocated for the introduction of a green supporting factor. However, no supervisor has gone as far as the National Bank of Hungary, which introduced a green supporting factor for housing loans and for corporate and municipal exposures in 2019 as part of its ICAAP framework. This regime remains unique worldwide. For this reason, we undertake a brief review of its most significant features.

The main effect of implementing a green supporting factor will be a reduction in the capital requirements that banks face for green exposures. As lower capital requirements would result in lower costs of capital, banks will be encouraged to expand green lending and/or cut the interest rates of these loans.[29] This approach may admittedly have other objectives, such as actively contributing to the mitigation of transition risks, as banks will have a clear incentive to overweight the exposures with lower transition risks in their portfolios. Moreover, it may also encourage banks to improve their data-gathering capabilities with regard to the sustainability of their clients' activities, and the continuous monitoring of them from a sustainability perspective. If well defined, a green supporting factor can benefit from its simplicity and transparency, enabling banks, investors, and supervisors to fully understand the impact of the "green factor" on the banks' capital adequacy.[30]

The introduction of this regime may come also with significant drawbacks. First, it implies a direct relationship between risk and green, while currently there is no clear

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[27] The definition of a brown penalizing factor will seek to increase the capital requirements for those exposures that have been identified as "brown" or inconsistent with the environmental objectives of the country. To the already discussed lack of evidence of a green risk differential, a brown penalizing factor may also restrict the available funding that high-carbon intensive companies need to address the decarbonization of their economic activities. Moreover, funding-deprived companies may end up turning to the unregulated financial sector, creating gaps and blind spots in banking supervision.

[28] See "*Towards a Green Transition Framework*" (EBF, 2017), or "*The Green Supporting Factor: quantifying the impact on European banks and green finance*". Even more relevantly, the former European Commissioner for Financial Services, Financial Stability and Capital Markets Union Valdis Dombrovskis expressed in 2017 a positive view on the possibility of defining a green supporting factor to lower the capital requirements for specific loan categories, such as energy-efficiency mortgage loans or loans for the acquisition of electric vehicles. In these statements, the former Commissioner suggested even the possibility of defining the green supporting factor by using the same criteria for the supporting factors for SME and for high-quality infrastructure projects already included in the prudential regulation.

[29] Lowering regulatory capital requirements for a loan may mean lowering capital costs. As typically these costs are directly factored into the banks' pricing models, the green supporting factor is expected to reduce the interest rate of these loans.

[30] This transparency can be achieved, for example, by forcing the disclosure under Pillar 3 of the impact of the green supporting factor in the bank's risk-weighted assets and capital requirements.

consensus about this;[31] the risk of a green project will not only depend on the activity, but also on other factors, such as its capacity to generate revenue, its operational soundness or leverage structure. Therefore, this regime can potentially redirect financial flows towards the green assets, contributing, at the same time, to loosening credit underwriting standards, which in an extreme situation may result in green bubbles. Moreover, disregarding risk-based considerations when defining the prudential framework may set a relevant and perhaps dangerous precedent,[32] and may be used in the future for other non-prudential purposes. Crucially, if the incentives provided by the regime are strong, this may raise the risk of a credit guided model for the financial system, where the allocation of financial resources does not strictly follow the key risk-reward relationship but is also led by economic development and/or environmental considerations. Moreover, it can exacerbate greenwashing risks.

These drawbacks are precisely those that have prompted the EBA or the Basel Committee, among other authorities, to publicly express their opposition to this tool, arguing that the prudential regime should be risk-based, as any departure from this principle has the potential to undermine its credibility and reliability.

Several key elements on the design of the frameworks should be considered by the supervisors. Among others, they cover the following aspects:

9.4.1.1. The definition of green assets

The first question to be addressed regarding the framework is how to define the scope of the program. The supervisor should unambiguously define "green assets", as they will be ones to benefit from the special capital regime. In the context of the EU, relying on the green taxonomy is a key advantage, as regulators would not need to bother defining what is sustainable or green. Nevertheless, the EU taxonomy is still to be fully completed.

This issue, along with the specific transition needs of the Hungarian economy,[33] explains the decision of the National Bank of Hungary (Magyar Nemzet Bank, MNB) to combine the EU Taxonomy's technical criteria with other criteria defined by the central bank itself. For example, it has chosen to include specific retail housing loans to improve the energy efficiency of buildings only under the scope of the supporting factor, and to fund specific new projects on renewable energy or investments in electromobility.[34] The national bank also introduced specific reporting templates for the banks that

[31] See the examination of the current academic research conducted by the EBA as part of its "*Discussion Paper on the role of environmental factors in the prudential framework*" (EBA/DP/2022/02). In Annex 4, the Paper summarizes the main papers that explore the existence of the so-called risk differential or "green factor".

[32] As explained above, the CRR already contains supporting factors for both SMEs and specific infrastructure projects (Articles 501 and 501a CRR, respectively).

[33] Such as the urgent need to renovate the real estate of the country, which is in an aging state and currently with low energy efficiency.

[34] The National Bank of Hungary has defined its framework for identifying loans under the green supporting factor mainly by using two different criteria:

For loans and investments without a specific green finance framework in the following categories: (i) have chosen to participate in the program to systematically report the loans that benefit from it. The reporting has significant benefits for the banks, as it forces them to gather more data on the sustainability of their clients' activities, but also for the supervisor, giving it a system-wide view on the evolution of green lending across the banking sector.

9.4.1.2. The extent and amount of the benefit

As has been discussed, the implementation of a green supporting factor will be translated into a reduction of the capital requirements for the covered assets. Quantifying this reduction is hardly a straight-forward exercise, as the lack of evidence of a green risk differential has precisely the effect of precluding a risk-based quantification. In the absence of a risk-based approach, the main criteria that regulators should consider are the intended impact that the regime will have (the intensiveness of the factor) and the maximum impact that it could have on the capital adequacy of the banking sector.

The case of Hungary illustrates well the trade-off between creating sufficient incentives for green finance while ensuring that the regime only has a modest impact on the capital adequacy of the Hungarian banking system. The reduction in the exposures under the regime ranges between 5 and 7% of the exposures (the incentive), but the regime also caps the total impact of the green supporting factor in the bank's total capital requirements (1.5% of the total capital requirements).

9.4.1.3. The types of requirements

There is uncertainty on how the green supporting factor will be configured and the specific requirements through which the regime can be designed. A green supporting factor could be implemented through the Pillar 1 or Pillar 2 Requirements or through the Pillar 2 Guidance.

A Pillar 1 green supporting factor would undoubtedly maximize the impact of this regime.[35] It is the most transparent and impactful route because it ensures that green exposures can receive lower capital requirements. Nevertheless, as there is no international consensus in this area, amending the CRR[36] to introduce new requirements will imply drifting away from Basel III, potentially undermining the credibility of the EU's commitments to fully implement international standards, where full implementation is

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renewable energies, (ii) electromobility, (iii) sustainable agriculture, (iv) energy efficiency investments, and (v) sustainable real estate. The supervisor has fleshed out different criteria from each category, in some cases cross-referencing them with the EU Taxonomy. Where the technical screening criteria of the EU Taxonomy was not available, it has defined alternative criteria, using market data or alternative sources. For example, where information about the energy efficiency of a building is not available, the National Bank of Hungary allows banks to use the energy efficiency ratings of internationally-recognized rating providers.

For loans and investments within a green framework: it provides either a green bond or a creditor or borrower-defined green lending framework

[35] As currently happens with the SME and infrastructure supporting factors included in the CRR.

[36] Note that the possibility of introducing a green supporting factor unilaterally by a EU Member state is currently off-limits, as the capital requirements are set by a European regulation, which leave very limited discretion on their design.

still pending.[37] Moreover, the introduction through Pillar 1 would create the expectation that the green supporting framework will become a permanent feature of the capital requirements regime. As it is expected that an increasing proportion of bank loans will become green, the introduction of a Pillar 1 approach may result in a continuous decrease in capital requirements.[38]

Supervisors can introduce a green supporting factor through the Pillar 2 framework, resulting in banks facing lower capital requirements. This approach better suits those countries which actively rely on ICAAP when setting Pillar 2 requirements[39] as in these cases, a direct link exists between individual risks (i.e credit) and capital requirements. Expressing the supporting factor through Pillar 2 requirements will also suggest its transitory nature. This was the regime chosen by the National Bank of Hungary, where the green supporting factor was introduced through the ICAAP framework and intended to be temporary.[40]

The introduction of the green supporting factor in countries that apply a SREP-based approach to setting Pillar 2 capital requirements will be more challenging, due to the absence of a direct link between risks and capital charges.[41] An alternative option would be to use the Pillar 2 Guidance to reflect the impact of the green supporting factor. With this approach, the capital reduction for the exposure to green loans will be translated into a lower capital guidance. The non-binding nature of the Pillar 2 Guidance may make this instrument more suitable to effectively lower the capital requirements applicable to a bank's green assets.

9.4.1.4. The binding or voluntary nature of the regime

Another key element of the configuration of the green supporting factor is the binding or mandatory nature of the green supporting factor. A Pillar 2 regime may be voluntary, as it will be every bank's choice to voluntarily adopt the green supporting factor. In

[37] Joint EBA-ECB letter sent to the European Commission dated 7 September 2021 on the EU implementation of outstanding Basel III reforms and EBA-ECB joint blog on "*Strong rules, strong banks: let's stick to our commitments*" dated 4 November 2022.

[38] Unlike SME loans or infrastructure projects, Pillar 1 treatment could benefit a broad range of borrowers across different categories (e.g. retail, corporate and even public sector loans). The greener the economy, the higher the proportion of green loans that a bank is expected to hold on its balance sheet; resulting in the continuous reduction of its capital requirements. In the case of SME and infrastructure lending, the effects will be limited to a specific portfolio of the bank, as the scope is limited to the loans under specific portfolios.

[39] Many countries in Europe are currently setting their Pillar 2 requirements by using ICAAP. This is the case, for example, for the UK (Bank of England), Norway (FSA), Iceland (FSA), the Czech Republic (National Bank of Czechia) and Romania (National Bank of Romania), to name a few.

[40] For green retail loans, the program is expected to expire in 2024, whereas for corporate and municipal exposures, the regime is expected to last until 2025.

[41] As happens, for example, with the ECB which sets the Pillar 2 requirements based on the SREP ratings of the bank. The ratings are based on the assessment of the bank's business model, risks to capital, risks to liquidity and internal governance and risk management. In these cases, the lack of a direct link between risk categories and Pillar 2 capital requirements makes the implementation of a green supporting factor very challenging.

this regard, the decrease in capital requirements may work effectively as an incentive to improve a bank's data gathering and, therefore, risk management capabilities. This has been the approach that has been taken by the National Bank of Hungary, where banks can freely decide to apply this capital rule.

CONCLUSION

The transition to a less carbon-intensive economy is perhaps the most pressing need across the world, and particularly in the European Union. Huge money flows will be directed to economic agents for decarbonizing their activities. In this context, the role of banking supervisors should be undoubtedly limited to ensure that banks have put in place sufficient mechanisms and arrangements to manage climate-related risks. Supervisors are issuing guidelines and other legal instruments to flesh out the standards to be met by banks when managing them, conducting stress testing exercises and updating their supervisory methodologies to consider banks' exposure and management of these risks. These measures are mainly principle-based, allowing supervisors to gradually increase their expectations.

Against the pressing need for economic decarbonization and the threats, mainly in the form of transition risks, that it poses, EU regulators and supervisors are implementing or considering implementing other more stringent, rule-based measures. The first is already in the process of implementation and forces banks to disclose their green asset ratios, or the proportion of their assets that are aligned to the EU Taxonomy, but without setting a minimum threshold. The second may, already facing a significant pushback from supervisors, entail lowering the capital requirements for taxonomy-aligned assets. The third, currently in the process of discussion, is the requirement of mandatory climate transition plans, to be annually updated by banks, and reviewed by prudential supervisors, where banks will set their decarbonization targets.

In each of the three policy tools analyzed, there is a trade-off between prudential supervision and encouraging the swift transition to a greener economy. Requiring banks to prepare and annually update climate transition plans can become a risk-based approach to ensure that banks are not subject to high transition risks. The mandatory disclosure of GAR has several drawbacks and it is a mainly non-prudential measure. However, its counterindications may be offset by the absence of a minimum requirement or threshold. A green supporting factor will be in effect a tougher version of the GAR, by seeking to decrease the capital requirements allocated to green assets. The introduction of a green supporting factor could accelerate the decarbonization of the economy but at the expense of the credibility of the prudential regime, leaving it exposed to further political tinkering.

The described measures show the inevitable trade-offs of tinkering with the prudential framework. Choosing the right set of measures is and will be key in the coming years, especially if, as it currently seems, transition needs are intensified by the current geopolitical environment.

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
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
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
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
CRR	Capital Requirement Regulation
CSDP	Common Security and Defense Policy
CSPP	Corporate Sector Purchase Program
DFR	Deposit Facility Rate
DGSD	Deposit Guarantee Scheme Directive
DLT	Distributed Ledger Technology
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
FOLTF	Failing or likely to fail
FOMC's	Federal Open Market Committee
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
KYC	Know Your Customer
LCR	The Liquidity Coverage Ratio
LSE	London School of Economics
LTROs	Longer-term Refinancing Operations (LTROs)
MDA	Maximum Distributable Amount
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
MS	Member State of the European Union
MTBF	Medium Term Budgetary Framework
MTFs	Multilateral Trading Facilities
MTO	Medium-Term Budget Objetive
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
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
QE	Quantitative easing
R&D	Research and Development
REACT-EU	Recovey Assistance for cohesion and the territories of Europe
RRF	Recovery and Resilience Facility
RRP	Recovery and Resilience Plans
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
SME	Small and Medium-sized Enterprise
SRB	Singel Resolution Board
SRF	Single Resolution Fund
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism
SURE	Support to mitigate Unemployment Risks in an Emergency
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
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

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