



SCENARIOS FOR THE EUROZONE



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SUMMARY

This Policy Paper assesses the stability of the eurozone by addressing two fundamental questions: Has the eurozone lived up to its expectations? And: What are some of the basic the scenarios for the euro in the foreseeable future?

The review of the experience of the eurozone so far, shows that compared to for example the US, the economic performance of the eurozone has been average. The fixed exchange rates brought financial market stability that was missing in the 1980s and 1990s.

The Policy Paper describes four scenarios for its medium-term future. The most likely appears to be 'Business as Usual' (BAU), but convergence with moves towards a fiscal union also remains possible, as is a scenario of divergence, driven by a combination of ever-increasing public debt levels in some Member States with stubborn inflation and a return of risk aversion. In the extreme, such a scenario could rekindle calls for exit or break-up – although this remains highly unlikely as the historical experience suggests. Finally, we present the minimum model as scenario. The minimum model identifies the basic requirements for a monetary union. The minimum model builds on the subsidiarity principle. Further steps are taken for political purposes.

To foster adherence to the fiscal rules of the euro, which are designed to forestall a scenario of divergence, the report recommends strengthening the enforcement Stability and Growth Pact through a strengthened European Fiscal Board based on an active subsidiarity-based network of the existing national Independent Fiscal Institutions. Moreover, the independence of the Commissioner for the Economy should be strengthened.

PREFACE

This report discusses the future of the euro in the light of the near quarter of a century of experience with Economic and Monetary Union. Has the eurozone lived up to its expectations? How effective have been the steps taken to stabilize the eurozone? What are some of the basic the scenarios one can imagine for the euro until the end of this decade? What combination of circumstances could lead to an exit if a euro area member state and how conceivable is an exit?

These questions are almost of perennial relevance in relation to the eurozone where public debates have been full of assumptions about the eurozone suffering from design flaws, triggering a transfer union, falling apart or, in positive turns, actually resulting in major economic and political gains. Moreover, while the current conditions in the eurozone do look worrying with high inflation, high debts and disappointing growth figures, 2023 is also the year that the negotiations on the reform of the Stability and Growth Pact have to be finalized. Are the directions in which these negotiations are unfolding moving in the direction of what we would identify as the essential governance package for the eurozone or will economic governance remain a processing of incremental change with little direction?

Now, more than 30 years since the decision in Maastricht to create the economic and monetary union, we were asked to analysis these profound questions head on, on request of the Vice-Chair of the Committee on Economic and Monetary Affairs, Michiel Hoogeveen, and Chair of the Committee on Budgets, Johan van Overtveldt. Both members of the European Parliament belong to the ECR Group.

We welcome it very much that politicians request an independent assessment to stimulate their own thinking and to transparently share the analysis for wider public debates. To ensure our independence as well as to further enrich the research, we have put together an interdisciplinary and high-level sounding board to discuss the set-up and the conclusions of the research:

- Dr. Cinzia Alcidi, Director of Research, CEPS.
- Prof. Dr. Arnoud Boot, University of Amsterdam / The Netherlands Scientific Council for Government Policy
- Prof. Dr. Amy Verdun, Jean Monnet Professor, University of Victoria
- Prof. Dr. Charles Wyplosz, Former IMF and The Graduate Institute, Geneva

We are very grateful for their input and to have had access to their broad expertise and experience during the writing of the report. The arguments and conclusions in the Report do not reflect the positions of the (individual members of the) Sounding Board.

Finally, we would also like to thank Jean Wanningen, expert from the Dutch political party 'JA21' in the European Parliament, for his professional management of this project within the ECR, for setting up the mid-term presentation, and for emphasising throughout the project the importance of the independence of our assessment as the only basis for informed public debates on the future of the euro.

Daniel Gros, CEPS

Adriaan Schout, Institute Clingendael
Radboud University

Daniel Gros brings his expertise as a distinguished economist who has worked on EMU even before the euro project started in his position as adviser to the Delors Committee. He is also co-author of the leading textbook on European Monetary Integration. He has provided numerous contributions on the management of the euro crisis. He is an advisor to the Committee of the European Parliament which holds the President of the ECB accountable.

Adriaan Schout is Senior Expert and Institute Clingendael (NL-The Hague) and Professor European Public Administration, Radboud University (NL-Nijmegen). He has a wide expertise in EU governance including in sectors such as border control, aviation safety and EMU. This offers the opportunity to link challenges that seem specific to a policy sector to generalizable themes in multilevel governance (subsidiarity, management of interdependence, role of the Commission in EU networks, etc.). He contributed to the White Paper European Governance (2001) and was member of the advisory committee on EU affairs to the Dutch government. His book *The Coordination of European Governance*, won the prestigious price for 'Best Book in Contemporary European Integration Studies'.

EXECUTIVE SUMMARY

The current state of play: is the euro a success or a failure?

The overall growth performance of the euro area can be best be described as ‘middling’. Despite lower headline growth, it comes close to that of the US if adjusted for demographic factors. However, this average performance should be viewed as disappointing because productivity growth has fallen behind the US. This is despite comparable investment rates, reforms and rapid increases in education levels. This lack of productivity growth – in southern European regions and notwithstanding large-scale EU investment funds – rather than monetary union itself seems to constitute the eurozone's key challenge.

Despite achievements in real convergence, some eurozone countries can be regarded as being persistent weakest links. Their weaknesses, however, have little to do with the euro but are the result of differing national political and institutional characteristics.

Regarding nominal convergence, public debt has increased in the euro area, but less so than in most peers (the US, the UK, Japan), yet with increasing polarisation across countries. The two to four countries with debt above 110 % of GDP account for nearly 50 % of the euro area's GDP. The 8-10 countries with a debt level close to 60 % make up a similar share.

As this Policy Paper shows, most of the fiscally weaker countries have also lagged behind in convergence in terms of GDP per capita. However, the importance of convergence in terms of growth per capita needs to be qualified. Other monetary unions and economic systems, such as the US, the UK, and Germany, are also characterised by persistent lack of real convergence in some regions. Convergence in terms of growth (real convergence) is not required for a stable monetary union so long as debt levels are sustainable (nominal convergence), and it is indeed debt levels where the eurozone faces risks to its stability.

Member States were already highly divided in the run up to the Maastricht Treaty in terms of political preferences for what form fiscal federalism for monetary union should take. It is mainly though due to the deterioration of France and Spain's public finances that these preferences now coincide with current debt positions. Suffice to say, the frozen conflict from Maastricht still lingers on. Finding an agreement on economic government could be possible if one could outline the minimum requirements for EMU. This brings us to the scenarios for the eurozone outlined within this paper.

Scenarios and likelihoods

Against the background of limited productivity growth, diverging debt levels and a frozen conflict over economic governance, we present four scenarios. The scenarios (with the exception of the break-up scenario) can be stable but that does not mean that stability is a

natural situation. Their stability depends on (considerable) political tensions that prevent the development of a shared governance model.

1. Business as Usual (BAU)

Under this scenario, the frozen conflict over economic governance that was not resolved in Maastricht continues. There is no major step towards fiscal integration nor a turn towards a broadly agreed economic governance model. Consequently, economic governance and crisis solutions remain a matter of tough negotiations.

High debt levels and low growth remain in some countries but a combination of peer pressure (a reformed Stability and Growth Pact (SGP)) and financial market signals (risk premia) are generally sufficient to prevent dangerous divergence. Moreover, the relative economic fortunes of different Member States could change considerably. Countries which have had the best combination of growth and debt reduction over the past decade might not be the best performers in the future. This awareness alleviates tensions within the euro area, although a few countries continue to be problematic but without falling over the edge.

Major economic shocks do occur and necessitate *ad hoc* actions to help those hardest hit. EU and EMU members would thus benefit from an implicit loan-based re-insurance mechanism – but there would not be an explicit insurance mechanism. Each crisis demands new negotiations.

Under BAU, Eurobonds remain a divisive issue as risk premia do not disappear but remain manageable as governments basically kick the can down the road. Indeed, the eurozone has been kicking the can in relation to Italy for the past twenty years but it might as well kick the can down the road for other countries over the next few decades.

In short, there is continuous haggling over solutions and decisions are postponed. In essence, BAU is about buying time and nothing else.

One danger inherent in this scenario is that an increasingly political European Commission no longer acts as an independent referee and allows rules and mechanisms to be disregarded or watered down. This could result in the legitimacy of decisions becoming contested.

This scenario probably best captures what has happened thus far, with piecemeal reforms resulting from continued compromises between the northern and southern views. This scenario could well be the most likely scenario to continue into the future.

2. Deeper integration

The deeper integration scenario is the scenario favoured by the EU institutions as can be seen from several official reports (in particular the [four \(or five\) Presidents reports](#)). It supposes a major shift in fiscal policy competence to the euro area and up to the EU level. The eurozone would need ambitious financing to provide the intended shock absorption mechanism. An EMU budget worth several percentage points of GDP would be required for this, but even this would still leave the vast majority of public spending (and debt) at the national level. This scenario could thus work only if control over national fiscal policy

becomes effective, Member States accept to hand over sovereignty in several areas and cut back national budgets accordingly.

Moreover, great care would need to be taken to ensure that the EMU decision-making process for the euro area budget is not subject to the same deficit bias as at the national level.

With most fiscal policy decisions and tax administrations still national, the potential for major divergences in economic performance remain and complete protection against financial market pressure might lead to more debt accumulation at the national level (moral hazard), while also at EU level attempts are made to create an international market for Eurobonds. Political tensions are likely to continue between national versus EU tasks, and over resources and contributions.

A full fiscal union is not required. That the responsibility for sound socio-economic governance rests at the national level need not be problematic if common policies – particularly those concerning public debt – are respected. Suffice to say, this scenario is not very likely to occur.

3. Divergence: Break-up scenarios

Under this scenario, public debt levels would continue to drift further apart. Combined with an environment of higher interest rates, doubts about the sustainability of public debt increase. Tensions between high and low debt countries may spill over into the euro area institutions. Going by past experience, Italy and Greece are likely to constitute the weakest links in terms of public debt.

With tensions mounting, the ECB might create and activate new bond-buying programmes. However, these decisions could be contentious and be supported only by a small majority of the ECB's Governing Council when price stability considerations would not warrant such a step. There could also be an increasing number of conflicts inside the Commission itself and the Eurogroup as to whether austerity in high debt countries is needed, and over the appropriate fiscal stance of the euro area.

Tensions might also increase over time through a vicious circle of high debt and high-risk premia that depress growth. A massive issuance of Eurobonds could be a lifeline for some high-debt countries. But the inherent risk would also fortify opposition from others, and doubts would remain over the effectiveness of a truly European financial programme.

In our assessment, if this vicious circle operates for long enough, it could lead to a loss of European competitiveness, an erosion of trust in national and EU governance and a sharpening of mistrust between Member States. Eventually, in conjunction with some major outside shocks, one or even more countries could contemplate leaving the eurozone.

We regard this scenario as not very realistic for the foreseeable future.

4 - The minimum model

The discussion on the state of play in the eurozone and the scenarios allow us to determine what is required for a stable EMU. These are just a few minimum requirements in terms of economic stability.

The minimum model offers the most subsidiarity-based scenario. Member States are supposed to have first-line control and related institutions to monitor and adapt their policies and systems to new circumstances, and to respond in heterogeneous ways to crises. Additionally, the EU level offers second-line control (i.e. control of the national controllers) and the required loan-based back-up systems.

The minimum requirements for a stable monetary union seem to align with the Maastricht compromise – a subsidiarity-based cooperative mechanism for monitoring economic trends in Member States, a safeguarding of market forces for external adjustment, and Member States' acceptance of market signals (risk premiums) as a sign that fiscal policy might be unsustainable.

The role of the ECB is restricted to price stability (i.e. it is not responsible for spreads, nor for green investments). The ECB's design – particularly the composition of the Governing Council – also needs further attention to strengthen its independence.

Additionally, the reforms (banking union with the Single Supervisory Mechanism (SSM), the European Stability Mechanism (ESM) etc.) thus far have reinforced systemic financial stability (mainly over the banking system). This should make it easier to accept financial market signals because the pressure to bail out indebted Member States would be reduced if the problems of any individual country do not risk financial mayhem (and thus large costs) for the others.

The no-bail out principle needs to be respected. However, every so often a serious crisis may occur when one (or more) Member State can run into serious liquidity problems. Mutual support should thus be possible to prevent an unnecessary systemic crisis. In general, support measures would be loan-based.

The minimum scenario would imply a shared recognition of the rules agreed in the Maastricht Treaty. Without shared acceptance, this scenario is not stable. Either from the EU level or from countries in distress, or because some countries desire a fiscal union for reasons other than moving towards the deeper integration scenario. One option to defend the minimum model would be to use opt-outs.

The minimum model is politically unstable. First, there will also be demands for fiscal and monetary support. Second, integration breeds integration. Deeper integration in sectoral policies would trigger incentives and create mindsets to also deepen EMU. To safeguard the subsidiarity-based minimum model, EU Member States may decide to use opt-outs for more elaborate governance systems.

Implications for SGP reform

The main policy conclusion from our analysis is that after 30 years of experimenting with governance reforms and an assessment of likely scenarios, a decision is now required about which scenario and related governance model represents the right way forward. This also has consequences for the current discussions on SGP reform:

- A self-declared 'political' Commission has difficulties fulfilling its role as an impartial interpreter and enforcer of fiscal rules. Moreover, it has its own institutional interests that are reflected in its latest proposal that essentially increases its own role.
- The redesign of economic governance must start from the application of the subsidiarity principle (see Chapter Five). The soundness of national policies needs to be monitored at the lowest level possible (the first line of control by independent and transparent national authorities). A politicised and centralised system of monitoring and enforcement has proven to have little impact, bite and ownership. Socio-economic decisions are too multilayered to be supervised at the central level and moreover, political responsibility rests at the national level.

If Member States are responsible for the first line of control, the Commission can assume responsibility for team-based second-order control ('controlling the controllers') and for taking countries to Court in the case of repeated negligence. Hence, the SGP should go back to the principle of first-order control – a foundational principle in the Treaty.

- The Commission's proposal to empower itself to bilaterally negotiate bespoke multiannual 'fiscal structural' plans would basically mean there are no longer any fiscal rules nor independent supervisions, nor a distinction between first and second order control.
- This team-based subsidiarity-based approach, building on independent and transparent bodies can also be applied to revamp the European Fiscal Board as a network operating independently from the Commission and with maximum involvement ('empowerment') of the national fiscal institutions. Shared independent macroeconomic assessments of the eurozone could provide the background for national plans.

Recommendations

- a) This analysis leads to our recommendation to implement fiscal and economic supervision on the network of independent national fiscal authorities as described above. This will imply that the reports on economic and fiscal trends emerge from the IFIs' network. The reports, as preparatory input for the Commission's supervision tasks, will make the Commission's work more transparent and independent, and it will strengthen the national fiscal authorities.
- b) We suggest giving the Commissioner for Economy a separate, independent status within the Commission, strengthening their independence by limiting the power of the

President to fire individual Commissioners. The Commissioner responsible for the euro would remain part of the College and its collective decision-making. Since politics counts in the end, the College should be able to overrule the conclusions and recommendations from the Commissioner. In this case the President must follow the principle of ‘comply or explain’: a specific justification is needed as to why a College decision departs from the recommendations of the Commissioner. This will then, as it should, trigger heated political debates over suitable economic policies.

- c) A similar strengthening of independence should be considered for the European Fiscal Board. One way to increase the independence of the EFB and to co-opt Member States would be to reduce the number nominated by the Commission to three and allow the IFIs to nominate an additional six members, drawn from the IFIs themselves, on a rotating basis. The possibility that an IFI could become part of the enlarged European Fiscal Board would incentivise Member States to strengthen their IFIs and the general culture surrounding independent supervision. Moreover, the EFB would call on national IFIs to contribute to the evaluation of specific countries.
- d) To strengthen the European perspective of the individual members of the ECB's Governing Council, the presidents of the national central banks should have their own dedicated confirmation hearings in the EP.

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INTRODUCTION: THE STATE OF THE EURO AND OF EUROZONE GOVERNANCE

At the start of 2023 the euro area is experiencing a combination of high inflation and low growth. Public debt has reached unprecedented levels and the fiscal rules have been suspended after having been mostly disregarded over most of the life of the euro. Against this background the Stability and Growth Pact (SGP) will be re-negotiated -- and most likely not for the last time. Thirty years after the decision to create the economic and monetary union (EMU), it does not seem to have its balance yet and economic governance is still work in progress.

Given the current conditions in the eurozone, it is understandable that the euro-project is widely criticized. Public debates highlight a number of fears such as, lack of convergence and a related lack of trust in the stability of the euro, fear that the euro has hampered overall growth in the eurozone, and fear that the euro turns into a transfer union. These apprehensions also speak to the trust in the model of economic governance of which the SGP has played a central role, but which has been supplemented by additional steering tools such as the Lisbon Process, the EU Semester and the European Stability mechanism (ESM). These tools have however not prevented the further build-up of overall debt and -- combined with limited room for new crises and evident difficulties if interest rates increase -- not created a situation in which the stability and of the eurozone is guaranteed. In fact, doubts about the sustainability have been lingering in the background almost from the start onwards.

To confront the doubts about the sustainability of the eurozone, and to assess options for strengthening this report addresses three groups of questions:

- How to assess the current economic conditions of the eurozone? Has it performed good, average or poorly? More specifically: given fears of merging highly differentiated countries into one eurozone, and the related fears over not being a Optimal Currency Union, have member states converged in real terms of GDP per capita? Such convergence was regarded as vital for the stability of the eurozone when the euro was agreed in Maastricht in December 1991. If member states have not converged, is that in itself a problem for the stability of the eurozone?

Similarly, has the euro delivered price stability? The current combination of high inflation and low growth is due to very specific circumstances, and we do not know whether inflation will increase or fall over the medium term.

We thus take a longer view and discuss whether one could consider the euro as a failure or a success if one takes the average track record since its introduction and compares its performance with that of other major economies.

- In addition to exploring the economic performance of Europe's economic monetary union, we explore what federal model has been emerging and building on this: What key scenarios for the eurozone do we regard as a possibility? In the literature, and in

the media, we see ample scenarios being discussed. With a view to the feasibility of the eurozone, we discuss four scenarios: Business As Usual (BAU), Deeper Integration, Breaking-up, and the Minimum Scenario. Which of these offers a stable eurozone, which is most likely, and which of these is from an economic perspective a necessity?

- One question generally overlooked is: how to apply the principle of subsidiarity to economic governance? It is increasingly clear that the discussion on eurozone governance has focused on the central EU level with European rules and different types of European supervision. To explicitly bring in the subsidiarity principle we will discuss the role distribution between the levels and the required capacities at each level.

In discussing these questions, we have to underline that this Policy Paper is about the stabilization of the eurozone, not about the EU and its finances. This distinction is often overlooked in debates. As we will argue below, stabilization of the eurozone in fact does not demand an elaborate toolbox nor a sizeable fiscal capacity. Ambitions to increase investments in green transition or setting up social welfare functions fall outside of our analysis. Given the histories of the national welfare states, the member states have already developed essential state functions. The national programs maybe ineffective or inefficient and member states may be too indebted to set priorities, but that points rather to national reforms and the need to elaborate European ambitions. Member states may opt to increase a European fiscal capacity to finance EU ambitions for political reasons but that falls largely outside the scope of our analysis of the stability of the eurozone and of the essential requirements for stabilization.

Putting the current situation in a longer-term context, as well as in the context of developing scenarios of the euro, we can examine the quality of EMU governance and the expectations of the directions in which the EMU may develop. These scenarios and expectations are necessary as a basis for political discussions on the future of the EMU and of the SGP. Which of the scenarios is most desirable, what implications does this have for the ongoing SGP reforms, and what modifications do they demand in the roles of the Commission and of the member states?

The relevance of this approach lies ultimately in a more profound reflection on the SGP reform. As discussed below, the reform of economic governance of the eurozone has been highly incremental and mainly concerned tweaking the existing system. At some point a reflection is needed on what the essential – minimum - ingredients are for a stable monetary union that suits the histories of the European welfare states.

When the decision was taken at the Maastricht Summit in December 1991 to proceed to EMU and introduce the euro, European leaders knew, and experts warned, that not everything was settled. In fact, the decision was a compromise between those that first wanted convergence so that the eurozone would resemble an optimal currency union. Others wanted to make haste with the euro assuming that the commitment would, combined with market forces, result in a process along which the eurozone would adapt and deepen along the way so that the alleged design flaws would be solved. Beyond the ambition to create a monetary union, for some the euro was about modernization, for others it was

about building Europe, about trade or, as stated by Kohl, about building peace and friendship.

The Maastricht construction reflects these economic and political expectations. The consensus on price stability as the ultimate aim of monetary policy allowed for the creation of a strong and independent ECB. But there was no consensus on fiscal policy, which is linked directly to deeply divisive issues, such as income distribution, the wider role of the state in the economy, or the powers of the European Parliament. This lack of agreement is reflected in the near absence of mechanisms for fiscal coordination except for the Stability and Growth Pact (SGP), whose main aim was to prevent excessive deficits and debt that would put pressure on the ECB to provide governments with monetary financing. The latter had been pushed particularly by Germany as an insurance against so-called fiscal dominance (central banks supporting finances of governments).

The first decade of EMU was mostly smooth, mainly thanks to a global credit boom which masked underlying divergences, such as the lingering effects of German unification and a construction boom in the periphery.

The bursting of the credit bubble ushered in a long crisis period with major financial market dislocations that provoked major reforms in economic governance: ESM, Two- and Six-pack on governance, and for banking the Single Supervisory Mechanism and the Single Resolution Mechanism. Yet, the SGP remained one of rules and centralized supervision even though with financial backups. On paper, the spirit of self-responsibility and market pressures of the Maastricht Treaty was preserved.

As the scars from the financial crisis were healing, ESM programs came to a successful end and the new banking rules stabilized the sector, two additional 'once in a century' crises (Covid and the Russian war against Ukraine) hit the eurozone. The Covid crisis led to a major one-off expression of solidarity in the form of the NGEU project. NGEU provides massive transfers, not to save the euro, but to mitigate the impact of a major external shock on weaker EU members and to prevent the health crisis creating financial turbulence. NGEU is thus not part of the euro area governance.

Discussions about a (temporary) exit for Greece, or a split between a Northern and a Southern euro (Neuro/Seuro) have abated, and earlier outspoken politicians stopped campaigning for exits. But there remain deep differences on fiscal policy over how fiscal policy should be managed at the national level (prioritizing low debt or investments, dropping the 60% GDP debt target) and whether deeper integration, including a fiscal union and eurobonds, is desirable or necessary for the stability of EMU.

Differences of opinion on a hawkish or dovish the ECB run equally deep but seem of less immediate importance since the ECB's independence and price stability mandate are well anchored in the Treaties.

The key remaining problem for the eurozone is thus the disagreement on fiscal policy. One manifestation of this are the continuous reform efforts concerning the SGP, none of which has been able to solve the inherent contradiction that the euro area has a legitimate interest in countries not to run excessive deficits even though the ultimate sovereignty on fiscal

policy lies with national parliaments. This conundrum has not been solved for more than 30 years. A more profound approach starting from what can be identified as the real deficiencies, what is actually as a minimum required for a stable monetary union, and how to define the tasks in the EU's multilevel system, can contribute the debate instead of continuing tinkering on the basis of the current system and of trying to connect EMU to political ambitions of the EU more generally which have little to do with the question of how to stabilize a monetary union.

Before assessing the economic performance of the eurozone in terms of nominal and real convergence, we first address in Chapter 2 some of the expectations that people had when the euro was introduced. Under the headings of 'hopes and fears', we review a wide variety of expectations, assumptions and allegations ranging from a considerable level of optimism about the expected achievements of the euro and assumptions about the need for convergence, to concerns over the impossibilities to work without exchange rate fluctuations. Chapter 3 assesses how the eurozone performed and -- to have a realistic basis for interpretation of economic trends -- compares the performance of the eurozone to that of, among others, the US. Because some of the EMU discussions center around options for exits and break-ups, we draw lessons from the history of monetary unions in Chapter 4. To be able to discuss scenarios for the future of the eurozone, Chapter 5 introduces subsidiarity as an essential European governance principle. Attention for subsidiarity in relation to economic governance has been scarce. Evidently, monetary policy has been centralized in the ECB (there is only one euro and one official interest rate). Yet, economic policies and their monitoring and enforcement are largely national responsibilities. This question is vital to create ownership for the rules of the game of monetary union at the level where ownership belongs: at the national level. How has the principle of subsidiarity been used to ensure first and second order control? Subsidiarity has major consequences for ways of working, for the roles of the European Commission and, potentially, for national ownership. The four scenarios are presented in Chapter 6. For the conclusions see the Executive Summary in the opening of this Policy Paper.

1. THE EMU: HOPES AND FEARS

There were quite a number of reasons for introducing the euro. The problem of a multitude of reasons is that there are also a range of assessment criteria, and that impressions of success and failure can vary strongly between individuals or member states. In assessing the euro, we should also acknowledge that countries have had different reasons for joining the euro.

The focus here is on: what, in general, were the initial expectations and fears? Moreover, have expectations and fears changed? If so, the eurozone cannot be assessed on the basis of normative expectations in the past. As it turns out, many hopes and fears that were initially held have had to be revised along the way partly because the circumstances in the EU as well as the geopolitical context have changed and people have got used to new ways of working. An economic assessment of the performance of the eurozone is presented in Chapter 3. This Chapter presents the hopes, expectations and fears. We cannot address all expectations in this report. Nevertheless, it is important for the debates on the contribution and the future of the euro to specify the expectations with a view to assessing what has really been happening.

Judging from today, hopes were too high, and fears seem exaggerated (Franks 2018). Moreover, we have to take into account that it is impossible to assess whether a situation without euro would have been much better also judging by the developments in other countries --- such as Sweden and Denmark -- and other trading blocs.

The hopes and fears at the start of the creation of the eurozone, and even of the beginning of the European project, were partly political and differed from country to country. Some Southern countries sought economic and political modernization whereas in Northern countries liberalization was important (once the original aim of an end to the Franco-German conflict had been achieved). Germany was looking for international acceptance through European integration after the war and through accepting the euro after its unification following the fall of the Iron Curtain. France searched international prestige through European unity and (political) coordination on monetary policy because the independence of the Deutsche Bundesbank frustrated the one-sided adaptations of interest rates to correct the strength of the Deutsch Mark. For countries close to the Russian border, full European integration, including and the euro, are part of their security strategy. Hence the overall expectations of the euro are interconnected with the ambitions of the EU: modernization, liberalization, a sense of common belonging, security, regaining an international reputation, and power (Kassim and Schout 2023). Against this general background that is about much more than economic reasons, we now turn to some of the specific economic hopes and fears associated with EMU.

1.1. Initial economic hopes and the official narrative

The official narrative of the euro was economic. The economic debate on the introduction of the monetary union centered around reduction of coordination costs and the completion of the internal market ('1992'). The so-called internal market programme which started in 1986 with the aim of abolishing many barriers by 1992. It had been a great success both in terms of facilitating trade and in political terms putting European integration back on the map after a period of 'eurosclerosis' when member states had been inward looking in trying to solve the economic crisis around 1980. The thrust of the euro debates was that completing the internal market required one money as underlined in the major Commission financed project "One Market One Money" (Emerson et al. 1992) to complement the famous Cecchini Report on the internal market "Cost of Non-Europe"¹.

However, on closer reading of the Cecchini study, it was clear that the measurable direct benefits of the euro would be marginal. The costs of exchanging national currencies against each other were already low for commercial transactions in the 1990s (and have come down further since then). Applying these low transactions cost to the volume of intra-EMU trade yielded sums equivalent to about one half of one percent of GDP.

The official narrative was that "One Market needs one Money!" because an integrated market would be difficult to maintain with widely fluctuating exchange rates. Actually, closer inspection of the Commission's report reveals that the key argument was more the other way round: one money would help to create one (financial) market (Gros 2017).

1.1.1. A stronger global role for the euro?

Furthermore, one discussion that has now come back on the table are plans to create the euro into a rival to the dollar as international reserve currency (Emerson et al. 1992; EU Commission 2018*). Some of the alleged advantages would be the advantage of seignorage, cheaper loans and greater financial stability (EU Commission 2021*). The low interest rate environment over the last decade has rendered the global seignorage argument less convincing. It has been argued that the ambition to create a global role for the euro will require issuing major amounts of public debt to ensure a sufficient market for eurobonds and to create the trust in the financial markets that the euro as global currency is here to stay (Eichengreen and Flandreau 2019).

However, it is disputed that a corollary of the establishment of eurobonds for foreign reserve holders is that European taxes are required. Capolongo, Eichengreen, & Gros (2020) show that there exist other ways to provide foreign central banks with highly liquid and safe short-term euro assets (for example through the issuance of ECB certificates of deposits).

Moreover, the original hopes for a global role for the euro might have been misplaced anyway as more recent research suggests. The 'dominant currency paradigm' (Gopinath et al. 2020) implies that there are economies of scale in the choice of invoicing currencies. Once a large part of exporters has converged on the use of the US dollar it does not make sense for them to switch to the euro because many of their trading partners are using the US dollar

¹ European Commission (1988).

and because financial markets are much more developed in dollars (Gopinath, G., at al. 2020).

The question remains moreover, is to what extent the eurobond-based global currency ambition is realistic and desirable. As regards necessity, the euro is now already an important international currency (second most utilized reserve currency) as a result of the strength of the current account of the eurozone. As regards desirability, one needs to keep in mind that the exchange rate of the euro might become more volatile if the euro's importance as a global currency were to increase. This was also the reason why the Bundesbank never actively encouraged the international use of the DMark.

More recent, with the resurgence of geopolitical tensions the ability of the US to impose sanctions on the use of the US dollar have prompted discussion whether the EU could achieve a similar status through the international use of the euro. But if the dominant currency paradigm is correct, there is little chance that the euro could substitute the US dollar on a significant scale and the issuance of eurobonds would make little difference. The key remains the combination of the geopolitical strengths of the US and its central role in the international payment infrastructure. Regarding the realism of a much wider issuing of eurobonds from an internal-EU perspective, we will see in Chapter 6 that 'Deeper integration' is not one of the likely scenarios in the foreseeable future.

Currently, the eurozone is about 15% of *global trade* – not much less than when the euro was introduced. The slight fall in the share of the euro is due to the rise of China, not a fall in extra-euro area trade, which has remained strong. The euro is already the world's second most traded currency. The share of the euro *in foreign exchange* flows is roughly the same as its share in global trade and becoming slightly less given the increase of the role of the Chinese renminbi moving from 4% in 2019 tot 7% of all trades in 2022.² The role of the euro is now about one third of that of the dollar. In terms of *global reserve* currency, the share of the euro in global foreign exchange reserves is actually around 21 %.³ Maybe the role of the euro as foreign exchange currency can increase somewhat but one needs to be realistic when it comes to this further increase in a more diversified currency market. The combined share of the other currencies as global reserve currencies (yen, UK pound and renminbi) is now equal to that of the euro.⁴

² See https://www.bis.org/statistics/rpfx22_fx.htm#:~:text=Turnover%20by%20currency%20and%20currency%20pairs&text=The%20euro%20continued%20to%20be,from%2032%25%20in%202019.

³ Capolongo et al. 2020 discuss the medium term evolution of the euro's share. The ECB publishes each year a special report on the international role of the euro <https://www.ecb.europa.eu/pub/ire/html/ecb.ire.202106~a058f84c61.en.html>. For the most recent data see the IMF statistics <https://data.imf.org/?sk=E6A5F467-C14B-4AA8-9F6D-5A09EC4E62A4>.

⁴ See page 12 of the 2022 ECB survey: <https://www.ecb.europa.eu/pub/pdf/ire/ecb.ire202206~6f3ddeab26.en.pdf>.

The increase in the shares of the other currencies has come mainly at the expense of the USD, whose share has declined by over 10 percentage points since the financial crisis.⁵ The near constancy of the euro's share over more than 20 years and the rise of the rest suggests that there is little upside room for the euro (unless there is a run from the dollar). The motives of foreign exchange reserves holders, i.e. central banks all over the world in choosing the currency composition of their reserves are not well understood. It is thus difficult to know what measures would increase the share of the euro. Ito and McCauly (2020) suggest that invoicing practices and exchange rate movements are key determinants of the currency composition of foreign exchange reserves. These factors cannot be influenced by EU measures.

One should also take into account that the overall trend is that the share of the eurozone in global trade is likely to fall further due to the increase of other players (China, EMEs in general). In a multi-polar economy, a balance between the major currencies is preferable so that the role of the dollar is reduced while no one has the power to fundamentally manipulate the exchange rate (speech Governor Mat Carney, 2019, Speech Paul Thomsen IMF 2019).

Given these developments in global trade relations and financial markets, the best way to secure the international role of the euro is to reduce its vulnerability (Thomsen 2019).

1.2. The unexpected effects of capital market liberalization

Moving beyond the initial expectations we also have to consider the dynamics that occurred – immediately – after the introduction of the euro. A key element of '1992' was the abolition of capital controls. Financial market liberalization had already been foreseen in the original Rome Treaty but had never been implemented because until the 1980s countries like France and Italy wanted to keep a lid on capital outflows that were threatening from time to time their weak currencies. At the same time, there was a general desire to limit exchange rate variability. The conclusion was that the combination of stable exchange rates with full capital mobility would de facto permit only one monetary policy. The logical choice was then between EMU, or a German dominated system under which the Bundesbank would set policy de facto for all of Europe. But for countries such as Italy, Spain and France it was difficult to adopt the Dutch policy of tightly pegging to the DMark and blindly following the decisions of the Bundesbank. EMU was preferred particularly in France, even if it involved accepting an independent central bank (the ECB) which a strict price stability mandate.

The fear of exchange rate volatility seemed to be justified during the 1990s when exchange instability increased to unprecedented heights after the de facto breakdown of the European Monetary System. At one point in 1995 the Italian lira had depreciated 100 % against the DMark and Italian long-term rates had reached 15 %. Moreover, the aftermath of German

⁵ Part of this reduction in the share of the US and the rise of the rest might be a statistical artifact since the statistics on foreign exchange reserves refer only to 'identified' reserves, i.e. the reserves held by countries which provide the IMF with the data on the composition of their foreign exchange reserves. The identified reserves now account for the bulk of all reserves, but this was not the case in the past. The statistics on the composition of foreign exchange reserves from more than a decade ago are thus not directly comparable to today's data.

unification also provided a stark reminder that a monetary policy geared towards the needs of the German economy might not always be in the interest of the entire area. German unification introduced a profound asymmetry because it led to a sharp increase in inflation underpinned by an unprecedented boom in consumption and construction spending. Being pegged to the DM, the fall of the DM also implied a fall in the Dutch guilder at the time when the entry into the euro was prepared. This forced the Bundesbank to increase its interest rates sharply. This was not appropriate for most of the rest of Europe, where economies had remained much weaker (Gros 2010).

The experience of the 1990s reinforced some erroneous pre-conceptions. For examples, at first sight somewhat surprising, at least in retrospect, was the fact that the exchange rate gyrations and high interest rates of the mid-1990s did not entail significant stress in the banking system. This was another reason why financial market stability received little attention during the early 1990s when the details of the governance of EMU were negotiated. When Maastricht was negotiated that the 1990s an explosion of financial market activity, especially cross border, was not foreseen (Gros 2017). A large part of this cross border financing was provided by banks which led to vulnerabilities, that became apparent only once the bubble burst. Bank credit-to-GDP had increased everywhere in Europe (although Finland, Germany, France and Austria only experienced only modest increases between 1991-2011). In nine countries, the ratio more than doubled. The five countries in which bank credit grew most substantially –Cyprus, Ireland, Spain, Portugal and Greece – needed (and received) financial assistance during the crisis (2010-14). Few had foreseen this crisis.

1.2.1. Unexpected changes in fiscal trends

During the 1990s it appeared that France and Germany would be very similar in terms of fiscal policy. Germany's public debt to GDP ratio had been higher than that of France and the two countries were very similar in terms of public spending. ⁶ Nevertheless, the German authorities (and those of other Northern European countries) were much more concerned with the danger that EMU would lead tensions because Southern European countries might require financial support if their economies came under pressure because of a loss of competitiveness. The Italian Lira had devalued 13 times between 1979 and 1992 (and was still overvalued when it entered the euro). The awareness of instabilities led in 1996 to the agreement on the Stability Pact (later renamed Stability and Growth Pact) which created an elaborate procedure to enforce observance of the two key relevant 'reference parameters' of a deficit of 3 % of GDP and a debt ratio that should be either below 60 % of GDP or declining towards that value. This allayed the fears that EMU would usher a transfer union and paved the way for the eventual start of EMU.

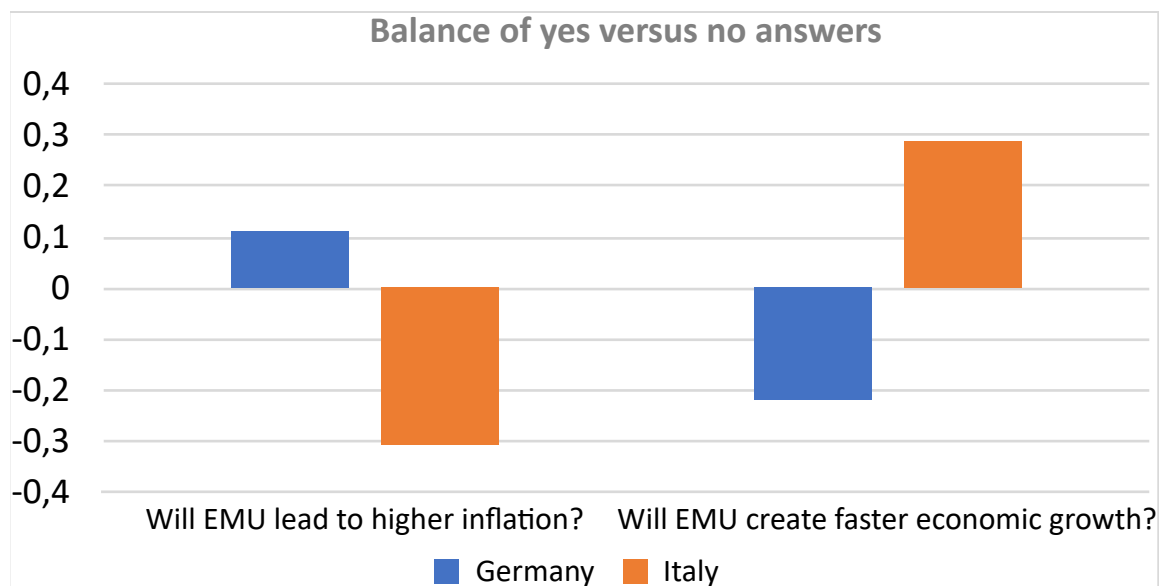
⁶ See Belke, Ansgar; Gros, Daniel (2020).

1.3. Public fears

The plans for EMU matured during a period characterized by the so called 'permissive consensus'⁷ which allowed major decisions to be taken by leading politicians and financial or European experts. However, when the start of EMU came closer, and particularly when the euro notes and coins were introduced in 2001, the public at large took notice. Understandably, renouncing the national currency represented a big step and public awareness of the unsettled cultural - and economic - differences between the member states raised many questions and stirred apprehensions. Just before the introduction of the euro, support for European had peaked. To some extent, the introduction of the euro in 1992 marked a transition point in public support as the politics of European became more important (Schout and Rood, 2013). The regular Eurobarometer surveys with their repeated questions represent the best way to measure public opinion over time.

By the time EMU started, the lingering aftermath of German unification was forgotten, and the public apprehension were mainly based on the pre-unification pattern of the 1980s when Germany had had lower inflation rates but also a better growth record. In short, the Germans feared higher inflation and lower growth as a result while the Italians hoped for lower inflation and thus higher growth. At the time inflation was seen as inimical to growth. It is thus not surprising that figure 1.1 below shows a stark North-South almost mirror image asymmetry of expectation (which were mostly contradicted by subsequent developments).

Figure 1.1 Different expectations from the euro: Italy versus Germany



Source: Eurobarometer

* The numbers refer to the balance between yes and no

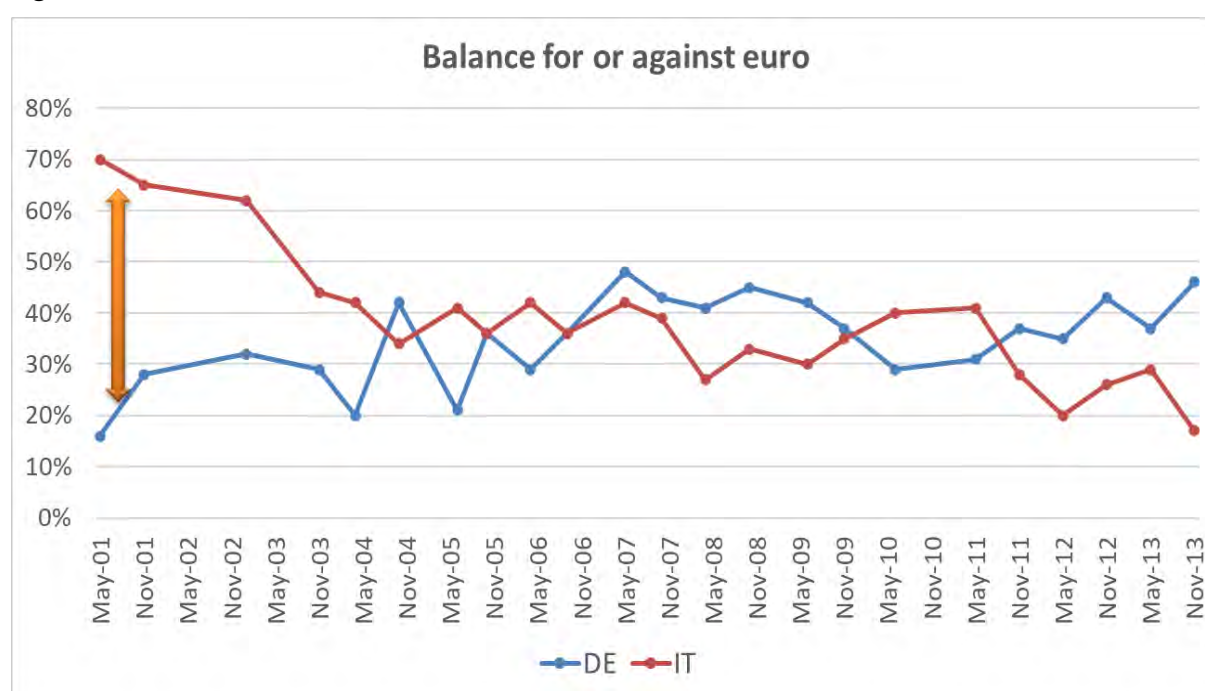
However, the impression of advantages and disadvantages turned around during the first decade of the euro. In Germany inflation did not go up and growth improved after the labour market reforms of 2003-5. The investment boom in China also provided support for German

⁷ Verdun, A. (2013).

exports. Globalization resulted in low inflation. By contrast, in Italy the growth hopes were not fulfilled as the country became the laggard of the entire euro area.

These different economic trends underpinned a sharp reversal in popular attitudes towards the euro. As shown in chart 1.2 below popular opinion had been hostile to EMU at the start of the cash euro (2001) whereas the common currency started out extremely popular in Italy. Over time these differences first disappeared and then inverted as Italians grew more and more 'euro-skeptic' under the influence of continuing financial stress. By contrast, in Germany, opinions on the euro improved after 2010. The German population seems to have appreciated the stability provided by the common currency more than the potential fiscal costs of the various ESM programs and the measures implemented by the ECB.

Figure 1.2 Italian and German views on the euro over time



Source: Eurobarometer.

The latest Eurobarometer results indicate that public support for the euro is now close to historical highs in many Member States. But as we just documented, this should not be taken for granted. Public opinions tend to change fundamentally over time.

Somewhat ironically, trust in the ECB is higher outside the euro area (56 % of correspondents trust the ECB outside the euro area against only 47 % within). Trust in the ECB tends to be highest in the Scandinavian Member States outside the euro, namely Denmark and Sweden where trust in the ECB is over 70 %.⁸ Trust figure regarding the euro and the ECB tend to be closely linked to economic cycles (*Schout and Van Riel 2022).

⁸ See <https://europa.eu/eurobarometer/surveys/detail/2693>.

1.4. Changing fortunes

Once created, the monetary union hardly followed a predictable trajectory. There were many unforeseen developments and remarkable changes in relative performance. Germany entered at an overvalued exchange rate because of unification, with most of the other countries being slightly undervalued. Germany was thus considered famously the 'sick man of the euro', especially if compared to the then booming South.⁹ Germany's relative position improved gradually over time. But the financial crisis provided the real watershed, not only in terms of growth, but also fiscal policy.

The overvaluation of Germany while being in a temporary problematic economic situation had a major impact on the Dutch entry into the EU. Being pegged to the Deutsch Mark, The Netherlands entered at the same rate as Germany which was arguable too low for the Dutch economy (Szasz *). As a result, the impression exists that the introduction of the euro resulted in major loss of value for The Netherlands even though the cause had been the peg to the DM.

1.4.1. Deficits and debts

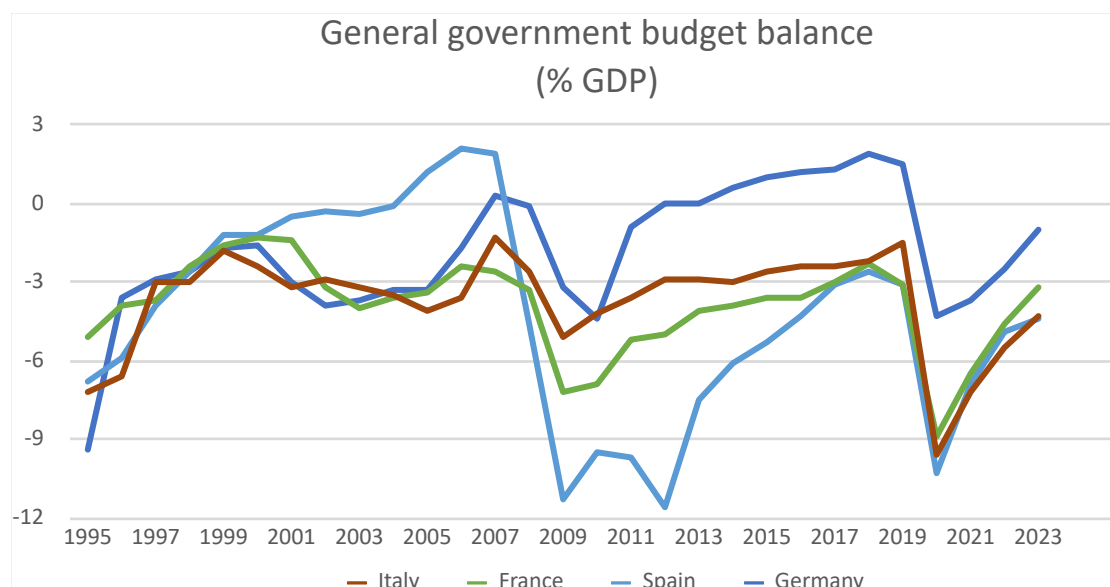
Chart xx below shows that until 2007 Germany had the same pattern of deficits as France and Italy. This similarity explains why in 2003 these three countries joined forces to impose on the Commission a reform of the fiscal rules.

Spain was the only major euro area economy running large surpluses and was at the time defending the Stability Pact rules.

These patterns changed drastically with the financial crisis. Spain started to run the largest deficit and Germany - also as a result of economic reforms - started to diverge fundamentally from France and Italy, running considerable fiscal surpluses whereas the other two remained in deficit, with the deficits of France exceeding that of Italy most of the time. Over the last crisis years the three Latin countries (Spain, France and Italy) have converged towards deficits which are most years about 2 percentage points of GDP higher than those of Germany. The key question going forward is whether this recent pattern will remain stable.

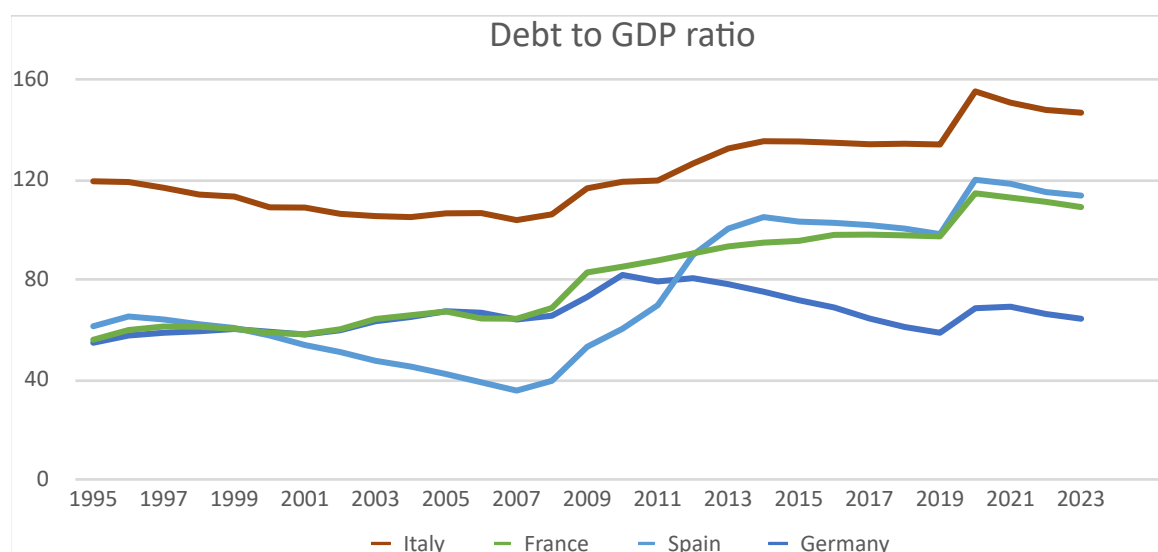
⁹ "Germany the sick man of the euro", <https://www.economist.com/special/1999/06/03/the-sick-man-of-the-euro>.

Figure 1.3 The evolution of fiscal policy over time, common shocks and diverging trends



Source: European Commission Ameco online.

Figure 1.4 Divergence in public debt ratios



Source: European Commission Ameco online

There have thus been some profound changes in national fiscal policies over the last quarter of a century of EMU. Taking a longer-term view one can also discern some profound changes, as well as some constant feature. For example, Italy had already fiscal problems inside the Latin Monetary Union (from in 1865 to 1914). But France was the center country with the strongest fiscal position in the LMU and it was also fiscally much more prudent during the interwar years whereas Germany was at that time undergoing hyperinflation followed by default.

After the WW2, Germany and France had a very similar fiscal performance arriving at EMU with very similar debt ratios as shown above. The fundamental fiscal Franco-German trajectory started only a little over 10 years ago. It remains to be seen how permanent it will be.

1.4.2. *A Euro risk premium?*

Another example of how the crisis and its aftermath changed views about EMU concerns the importance of having a national central bank as a lender of last resort. One criticism on EMU concerned the risk premium of being in the euro due to the absence of an own central bank. For example, at the early stage of the financial crisis it was observed that Spain - with a then still low state debt - paid a higher interest rates than the UK because it could not count on a national central bank. Spain would thus have to pay higher interest rates compared to the UK despite the latter (then) having a higher public debt (De Grauwe 2013). The basic argument was that a country outside the euro area could not be threatened by a liquidity crisis because in case of a buyers strike by private investors, the national central bank could always buy up national debt as a lender of last resort.

The Spanish government faced indeed higher interest rates than the UK for a certain period, close to the peak of the crisis, when Spain had still a lower public debt ratio than the UK. De Grauwe (2013) argued that the higher rates in Spain illustrate the cost of EMU membership. But by end-2014, Spanish interest rates had fallen to UK levels. Moreover, by that time the debt/GDP ratio of Spain had risen above that of the UK and the rating of Spain fell below that of the UK. This reversal in the interest rate differential should have turned the initial reasoning upside down: from 2014 Spain experienced a bonus from being inside EMU. Losses from bail-outs?

1.4.3. *ESM and banking union*

In the background of the euro discussions figures prominent questions over the euro as transfer union and the no-bail out. This issue is clearly visible in the discussion of the rescue funds (such as the ESM) and the transfers via the European system of central banks (buying of sovereign debt and TARGET2).

As regards the 'bail-out', the two key institutional reforms were the rescue funds (EFSF and the ESM) and the banking union. The European Financial Stability Facility and European Stability Mechanisms explicitly avoided the term 'fund'. The EFSF was set up to support three countries and it was later merged in the ESM. Both were strongly opposed in most Northern Member States on the grounds that they would imply a large burden on them. Moreover, given political apprehensions regarding the role perception in the EU Commission, these two instruments were located outside the Commission.

So far, no losses have materialized on the operation and given the modelling on the IMF, the chances of losses are reasonably small. The ESM manages the 5 programs (Ireland, Portugal, Spain and Greece). The sum of the outstanding amounts now to around euro 270 billion, most of which, euro 200 billion, is due by Greece.¹⁰ So far all countries have paid the interest

¹⁰ See <https://www.esm.europa.eu/financial-assistance/programme-database/programme-overview>.

on time. The first loans to program countries were made at punitive interest rates. However, it became soon clear that this would be self-defeating. Moreover, long term interest rates declined considerably after 2011/12. This led to a change in policy, first for Greece, to extend the terms for the loans, which became very long-term (up to 30 years). The other program countries were subsequently offered the same terms as Greece.

The changed policy did not involve any loss for the ESM. It just meant that the ESM was financing itself at very long maturities and then charged program countries its own cost plus a small fee. As a result, the ESM has made a (very small) profit every year so far.

The same applies to the banking union (which is incomplete according to many). Its operation so far has not led to any transfers. The Single Resolution Fund has accumulated close to 70 billion euro, close to its TARGET of 1 % of covered deposits.¹¹ As is normal in case of an insurance mechanism, the SRF is financed by private sector contributions. The Single Resolution Fund (SRF) has not been used so far and there is no sign that it would be needed any time soon to bail out many banks in Southern Europe. Moreover, to be able for a bank to make use of the SRF operates, first a bail-in from capital holders will be required of 8%. Might a bank fail, it is highly likely that it will be supported by the national government which case the government needs to turn to the ESM might it lose access to the financial markets.

1.4.4. TARGET 2

The balances which have accumulated within the payment system of the euro area, TARGET II, have been the object of a huge literature (Sinn 2020). The acronym TARGET stands for “Trans-European Automated Real-time Gross settlement Express Transfer system”) and is a system that moves money from one bank to another, both within countries and across borders, with settlement on the accounts of the ECB. The volume of flows on this system is gigantic, with the ECB reporting that every week the equivalent of one year of GDP (over 10 thousand billion euro) transit through the system making it one of the largest in the world.

Gros 2017 shows that the large continuous growth in the TARGET balances over the last years was related to the bond purchase program, PSPP and PEPP, under which the different National CBs in the euro area induced commercial banks to increase their deposits at the Euro system in exchange for government bonds.

Given this genesis of the increase in TARGET balances over the last year one would expect that they would shrink considerably when the Euro system starts to reduce its balance sheet by not reinvesting the maturing principal of the bonds it has already on its balance sheet. The ECB has already announced that it will start reducing its emergency asset buying programs (APP and PEPP) from 2023 onwards. The time path for disinvestment announced so far is very gradual. It will thus take a number of years for the balance sheet of the Euro system to shrink significantly. This means also that one should not expect TARGET balances to shrink very quickly either. However, their growth period should be over.

The distribution of the positive TARGET balances is highly concentrated with Germany, Luxembourg and the Netherlands accounting for the bulk. It has remained difficult to explain

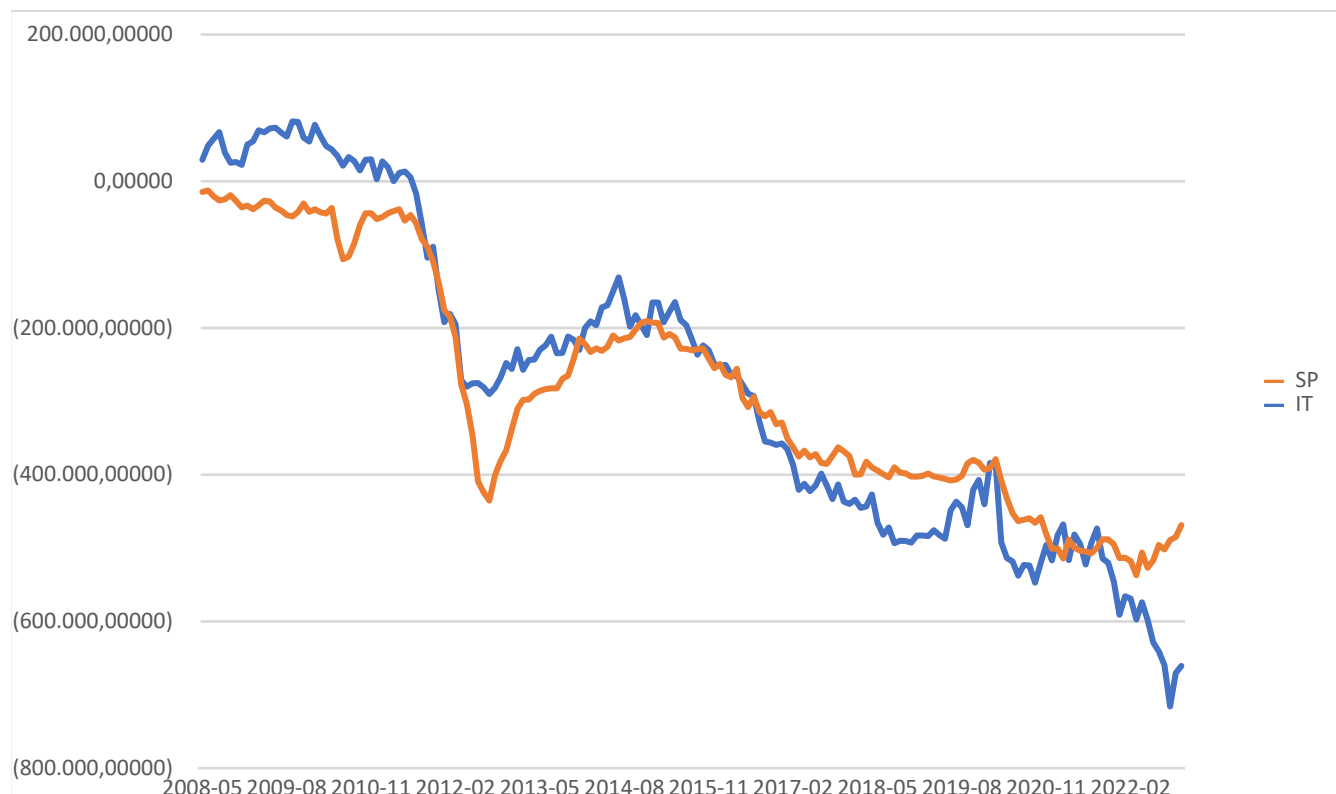
¹¹ See <https://www.srb.europa.eu/en/single-resolution-fund>.

why so much is concentrated in Germany. One simple reason is that many multinational enterprises concentrate their cash management in particularly in Germany (and less in the other two), which would lead them to hold large balances with German banks, and thus indirectly the Bundesbank.

What is the risk posed by the accumulation of these large accounting balances within the Euro system? The risks on the TARGET2 created by the asset buying programs, the risks are minimal. For the rest, they represent the result of financial cross-border transfers within the euro area (not necessarily the net balance of trade flows in view of flows related to financial services). As long as the euro continues to function normally these balances have no particular significance.

With the official interest rates of the ECB now in positive territory, interest will be paid and received on the outstanding amounts. This will not have a direct impact on the balances themselves but will lead to considerable intra-euro system interest payments.

Figure 1.5 The evolution of Target balances over time



The main concern raised by the large outstanding balances derive from the fear of an unfriendly exit by a major TARGET debtor (e.g. Italy) or by a wholesale break-up of the euro.

Italy is by far the country with the largest TARGET net negative balance, which as of end-2022 amounted to over 600 billion euro, the equivalent of about one third of GDP. The amount for Spain is at 480 billion euro much lower but amounts to a similar proportion of GDP.

Some years ago, a member of the Italian government proposed a plan (the Savona Plan) under which Italy would exit the euro and default on its TARGET balances. However, this policy was disavowed even by the then populist government (2018/9) and the idea of Italexit has received little traction over the last years. Defaulting on its TARGET balances would make little sense for a country which has been now a positive net foreign asset position and continues to run current account surpluses. Moreover, the experience of Greece shows that even in very difficult circumstances countries tend to service their obligations towards their EU and EMU partners, whose goodwill becomes even more important when the home country faces acute financial market tensions.

In an Italexit scenario with default on TARGET balances, the losses would presumably be shared pro-rata the shares of the remaining euro area members. This means that at that point the distribution of the creditor balances is irrelevant for the distribution of the losses. For example, if Italy left the share of the Netherlands would be around 6.5 % of the remaining euro area, so that the Netherlands would have to shoulder this part of the losses. If Italy were to repay only one half of today's TARGET balance, the loss for the euro area would be 300 billion, of which about 20 billion for the Netherlands and about 80 billion for Germany. (But see the likelihood of exits below.)

In this case one needs to assess the net balance of each participating national central bank (NCB) towards the rest of the system, not only the TARGET balance should be considered. Particularly Germany has a positive TARGET balance of 1 200 billion euro as well as a large net obligations towards the rest of the euro system due to the fact that a large share of euro notes and coins is put in circulation by the Bundesbank. The net position of the Bundesbank towards the euro system amounted to 'only' 725 billion euro by end 2022 (that of the Netherlands was 220 billion euro). If Germany were to leave amicably, it will have a claim on others of €725 billion. If it leaves by breaking rules, it might not have any claims. The others will honour this claim in the 'Reuro' (the Remaining euro), which might depreciate against the new DM (or the new Guilder).

The total break-up of the euro would probably take place in a situation of economic mayhem and political dislocation. It seems impossible to guess what amounts Member States would be willing to pay of their accounting balances at that point. There would presumably be anyway huge other claims and counterclaims (for example of TARGET2). We will come back to the likelihood of a break-up and which parties would have a benefit from leaving.

All one can say at this point is that the very large TARGET balances are likely to shrink considerably over time and that they constitute a tail risk in – the unlikely -- case political and economic relations in the eurozone break down totally. Hence, the risks countries run are low (see below).

1.5. Selected hopes and fears

An assessment of all relevant concerns related to the functioning of the eurozone is impossible within the constraints of this Policy Paper. Hence, below we briefly touch on a selection.

Firstly, austerity itself has been a topic of heated debate North and South to the extent that the term itself now seems out of fashion. Similarly, the impression is widely shared that deficit reduction goes leads to less investments. Yet, countries that made serious cutbacks in their debts and budgets are now the best performing countries in the eurozone and there does not seem to be clear link between budget reductions and fall in investment levels in member states. It would require special attention under which conditions fiscal consolidation has collided with growth (df. Alessini et al. 2019)

Secondly, another critique raised in a number of countries is the exchange rate with which they entered into the euro. If at too high a rate, the overall value of income and savings went down; if too low, prices went up. This was specifically a point in the Netherlands given that the Dutch Guilder went 10-15% too low into the monetary union¹² implying an initial and immediate reduction of wealth. As a result, inflation in the Netherlands rose to 5% in 2001 as a result of rising wages following the introduction of the euro. The problem however is not directly related to the euro. As discussed above, the Guilder was pegged to the DM and Germany depreciate in real terms due to the costs of reunification. Hence, the question is not so much whether the Guilder went in too high but what could have been done about it. It would have been difficult (and costly) to unpeg from the DM. Moreover, an appreciation upon entering the euro would have resulted in a massive outflow of money (and would have been difficult to orchestra discretely over-night upon entering the euro).

A third criticism concerns the lack of reform in some member states and the lack of supervision by the European Commission. European Parliament reports have repeatedly pointed to the lack of national commitment in following up Semester recommendations and in its search for political compromises the Commission has taken no country Court (Merand 2021). Yet, over time, most countries have implemented reforms and as discussed in the next Chapter, overall, the eurozone has performed moderately. The key problems have remained with two countries (Greece and Italy) whereas France, Spain and Belgium have to be vigilant in order to prevent from becoming a liability to the eurozone. In addition to these worrying trends, Ireland and East-European member states – and to some extend Portugal -- have performed (well) above average (Schout and Van Riel 2022). With Germany currently risking to fall behind, it is too early to assess whether eurozone member state will be able to re-find their economic and fiscal balances. In any case, the allocation of tasks of the Commission and the abilities of member states to ensure independent and professional economic governance needs to be put higher on the agenda. We will come back to this in Chapter 4* below.

Relatedly, a general critique on EMU is that it is difficult to adjust competitive positions within the eurozone (Wanningen 2019, Mody 2018)). In particular the ECB system has acquired a lot of critique on the long-term low and even negative interest rates. Allegedly, this has created the perception of reduced pressures on companies to innovate and hence that the euro has been a cause of low growth (Schnabel 2022), and of feelings of social injustice provoked due to lower wages and a general drop in purchasing power. The Chapter will pick up these trends in comparison with the trends in other trading blocks. In any case,

¹² [Gulden te goedkoop de euro ingeloodst - Nederlands Dagblad. De kwaliteitskrant van christelijk Nederland.](#)

the policies of the ECB have been largely comparable to policies of other central banks. For example, the Swedish central bank also engaged in massive bond purchases.¹³

Moreover, recently concerns have arisen over saving accounts due to inflation and sluggish interest rate revisions (for example Dutch savers lose most from all savers in the EU: Euro 1350 per 10.000 savings¹⁴). This number represents of course a very rough assessment. One would have to counterbalance it with the gains of mortgage holders or those of the government on its outstanding debt. Other factors which might include the loss of real purchasing power of the creditors would be the losses of Dutch pension funds. Any holder of nominal assets, for example, bank accounts or bonds held by pension funds has seen the real value of these assets decline with inflation at 10 %. One can thus calculate easily the loss of real value of Dutch bank account holders or Dutch pensions funds which invested in bonds. However, Danish or Swedish investors made much the same losses because today's inflation is a global phenomenon. It would thus not be correct to say that the ECB is responsible for the losses of bank clients or bond holders.

Finally, there is a discussion on what one can call integration by stealth and mission creep by the ECB (Majone 2014). One example of what can be seen as mission creep - the euro as rival to the dollar - is already discussed above. Other examples connected to the euro include the wider debate on a alleged need for a fiscal capacity (see the Deeper Integration scenario below):

The monetary union is sometimes perceived in the public debates as a lever to create a transfer union which will also strengthen the position of the European Commission, European Parliament and the ECB. Similarly, there are doubts about the extent to which the ECB will stick to its core task of price stability. Distrusts centres around the idea that the EU always adds more tasks and seldom about less. Proposals about a European digital currency or developing the euro into a global currency (implying much more European debts to create the basis for European bond market). We will come back to the tendency towards mission creep in the discussion on the scenarios where we underline that political choices are the result of power struggles. We will define a minimum set of requirements for the European monetary union. Whether governments decide to move forwards, that is up to the politicians in finding their hard-fought compromises.

1.6. Conclusions on hopes and fears

The argument here is not that the euro over- or under-performed. Rather, the introduction of the euro may not have made such a major difference for the economy. Without wanting to take too strong a position in the debate on the neutrality of money (Walsh 2010), this middling assessment of the monetary union fits the theory of Milton Friedman who concluded that in the longer term, money is neutral. There are many intermediating mechanisms and forces that drive a system beyond monetary policy. The euro is important

¹³<https://www.riksbank.se/en-gb/press-and-published/speeches-and-presentations/2022/the-riksbanks-losses-do-not-reflect-the-socio-economic-results/>.

¹⁴ ['Nederlandse spaarders grootste verliezers in Europa' | Geld | Telegraaf.nl](#).

alongside other factors such as the quality of national institutions and governance processes, and the extent to which economic governance is perceived as a subsidiarity-based multilevel system in which each plays its required roles.

We will come back to the economic performance in Chapter 3 to place over-optimistic hopes and possible fears that may look different in the short-run than in the context of longer-term and comparative perspectives.

2. ECONOMIC ASSESSMENT: MACROECONOMIC TRENDS AND PROBLEMS IN THE EUROZONE

This section provides a summary overview of the performance of the euro area on two metrics: income growth and public debt. The reason to focus on these two indicators is that the growth record of the euro area is widely held to have been weak and public debt, which was supposed to have been kept in check by the Stability and Growth Pact, did increase considerably. Moreover, low growth and high debt constitute the key current challenges for the euro area.

Economics does not predict a strong link between EMU and growth. A general tenant of economics is that inflation is a monetary phenomenon and that a monetary union should definitely lead to convergence in inflation, but not necessarily to convergence in income per capita or other indicators wellbeing. Moreover, the economic analysis of a monetary union is much more complex than that of economic integration in general. This was acknowledged already by the authors of the 1992 report of the Commission on the costs and benefits of EMU:

“The economics of international money, by contrast [to those of trade integration], are not at all well understood: they hinge crucially not only on sophisticated and ambiguous issues like credibility and coordination, but on even deeper issues like transaction costs and bounded rationality.” (Gros 2017)

There is thus no presumption that the actual growth track record of the euro area reviewed here was a consequence of the euro. Whether the member states of the euro would have performed better or worse if EMU had taken place is pure speculation. The one point on which most economists agree is that the introduction of a common currency should facilitate trade, which should yield a modest welfare benefit (but not a permanently higher growth rate). Initial estimates of the potential for increased trade integration were quite large. Rose Van Wincoop, 2001 proposed that EMU could lead to an increase in intra-area trade of 50 %. However, these initial estimates, often based on the experience of small poorer island economies, did not hold up when measured against the development of trade flows after 2001. The most recent estimates confirm some, but much more modest, increase in trade generated by the euro of generally in single digits (Teulings et al., 2011; Felbermayer and Steiniger 2019). The more recent estimates also find that the trade effects of the euro vary strongly across countries and sectors.

This section also briefly analyses how external adjustment worked inside EMU. This was an initially an important problem and longer-term the problem is likely to arise again. However, this issue seems less immediate today since at present there are no major external disequilibria that might need correction.

There is no need to dwell on the track record in terms of price stability.¹⁵ Until recently inflation had been stable and slightly below 2 %. The current bout of inflation was ignited by

¹⁵ For details see Schout and Van Riel 2022.

an unprecedented increase in energy prices. On both accounts there is little difference between the euro area and most other advanced countries (and other EU countries outside the euro area).

What sets the euro area apart (from the US or other large federal countries) is the splintered nature of its markets for public debt. This means that rising debt levels constitute a legitimate cause for concern at the Union level. Moreover, many have argued that the ECB should be the lender of last resort for highly indebted sovereigns facing a speculative attack. We thus discuss to what extent this has been the case and what the impact of ECB bond buying has been.

2.1. Macroeconomic trends

2.1.1. Growth

At first sight, it seems clear that the euro area is growing slower than its Anglo-Saxon peers, the US and the UK. The average growth for the US since 1999 has been at 2.12 % much higher than that of the euro area (1.29 % p.a.). Even the UK grew faster than the euro area (1.64 %), see Table 2.1 below.

However, one must adjust these overall growth rates for demographic factors. A group of countries with a stagnant population grows naturally less quickly than a country with a growing population. One measures typically how well off a country is by dividing GDP by the entire population. However, if one wants to measure changes in output relative to the demographic potential one should adjust for the working age population.

This is done in table 2.1 below which shows the overall growth rates in (real) GDP, the increase in the working age population and, in the last column, the resulting growth rate of GDP per working age population. The differences in GDP growth adjusted for the working age population are much smaller than the headline growth rates. The US is still growing more quickly than the euro area, but adjusted for the working age population, the difference is at 0.2 percentage points (1.44-1.24 %) much smaller than the difference in headline growth rates that provide often the basis for negative evaluations of the growth record of the euro area.

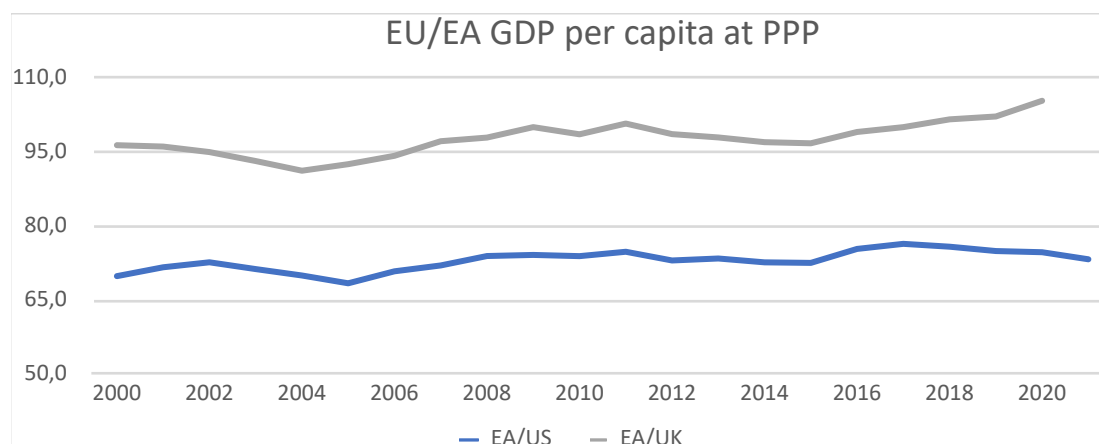
Table 2.1 Average growth rates 1999-2021

	Real GDP (1)	Working age population (2)	GDP per working age (3=1-2)
EA	1,29	0,05	1,24
US	2,12	0,68	1,44
UK	1,64	0,50	1,13
J	0,58	-0,68	1,27

Source: Eurostat.

Somewhat surprisingly the performance of the euro area looks even better if one does not compare growth rates over time, but the per capita outputs adjusted for Purchasing Power Parity across countries at each point in time. Figure 2.1 below thus shows the GDP per capita of the euro area has slightly increased relative to that of the US (from about 70 % to over 73 % of the US level). The euro area has also performed much better relative to the UK, especially since the Brexit referendum of 2016.

Figure 2.1



Source: Eurostat, Real expenditure per capita (in PPS_EU27_2020).

The two indicators analysed so far, the growth per working age population and GDP per capita adjusted for PPP, show small differences with opposite signs. Given that these two indicators have both different advantages and drawbacks, the overall conclusion that emerges is thus that the growth record of the euro area has been similar to that of US and somewhat better than the UK (or Japan).

2.1.2. Employment

Employment increased in the euro area by almost 15 million units until 2021, more than in the US, where the total increase in employment over these 21 years was slightly below 10 million. This high increase in employment suggests that labour markets have become more flexible in the euro area. But the higher increase in employment coupled with slower growth also means that productivity has increased much less in the euro area.

In both the euro area and the US, one finds that the increase in employment of the elderly cohort (those aged 55-64) was higher than the overall increase. This implies that there has been a net fall in employment of the 'non-old' (those below 55). Similarly, female employment increased by 12.9 million in the euro area, much more than the 2 million of male employment. In the US the increase in the employment of the old has also been higher than that overall, but the distribution male/female is less lopsided.

Table 2.2 A dynamic EA labour market

Panel A	Change in employment (millions) 2021-2000		
	Overall	Female	Old (55-64)
Euro area	14,9	12,9	16,5
US	9,7	5,5	11,9

Panel B	Percentage change in employment 2021-2000		
	Overall	Female	Old (55-64)
Euro area	10,9	21,2	86,0
US	7,1	8,5	61,6
UK	13,5	18,0	56,3

Source: OECD

In percentage changes one finds that since the introduction of the euro employment has increased by close to 11 %, but only 7 % in the United States as shown in table panel B of Table 2.2. The rate of increase in female employment has been much higher in the euro area, over 21 %, compared to only 8.5 % in the US. The highest growth rates were in all areas for the elderly (above 55) where employment increased by over 80 % in the euro area and 60 % in the US. As shown in Gros (2019) this is partially due to the increase in education levels since there are very large differences across skill levels among the elderly cohorts (unskilled workers tend to quit the labour force much earlier, probably since they have to perform more manual tasks).

The downside of the good employment performance is that GDP per employed, i.e. productivity has been disappointing and much lower than in the US. The US economy has grown by 0.8 % per annum more than the euro area. Panel A of Table 2.2 shows that euro area employment has increased about 5 percentage points more than in the US since 2000, about 0.25 % more per year. This implies that the difference in productive growth has been substantial, slightly more than 1 full percentage point per annum.

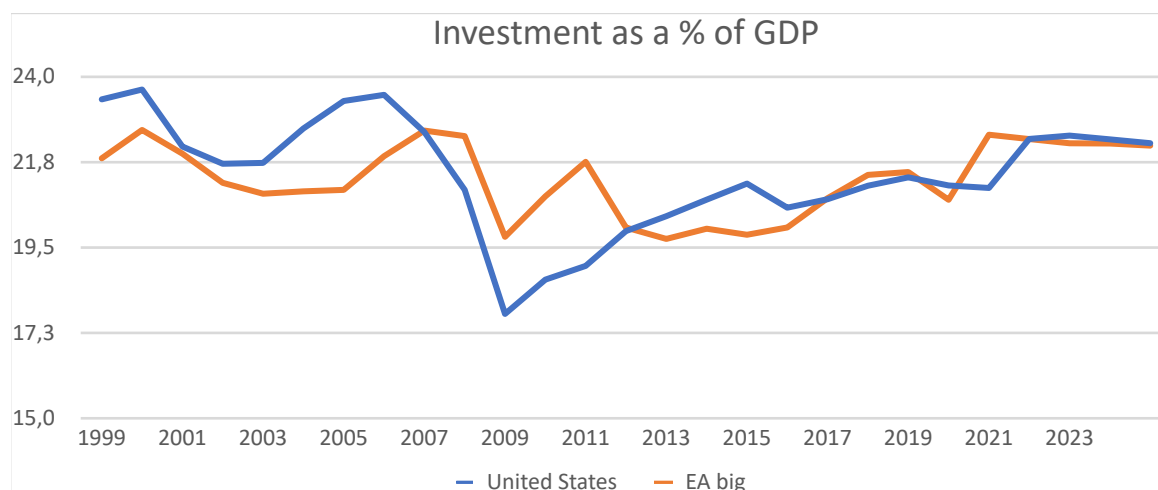
2.1.3. Investment

Many prescriptions to accelerate growth in Europe start with a call for more investment (Gros 2016). Some years ago, a purported 'investment gap' led the Commission to propose a 'Juncker Plan' (Rubio and Virel (2018)) to finance hundreds of billions of additional investment.

However, the broad figures on investment and especially the available data on the results of investment do not suggest that a lack of capital is the reason for the disappointing productivity performance of the euro area.

Figure 2.2 below shows the investment rate (investment as % of GDP) in both the euro area and the US. Investment fell on both sides of the Atlantic after the Great Financial Crisis. But part of this was to be expected since the period up to 2007 had been characterised by abnormally low risk premia and potentially excessive investment in housing. However, over time investment rates recovered along similar lines. The US and the euro area have investment a similar proportion of GDP over the first two decades of the euro; the main difference being that investment was somewhat more stable in the euro area.

Figure 2.2



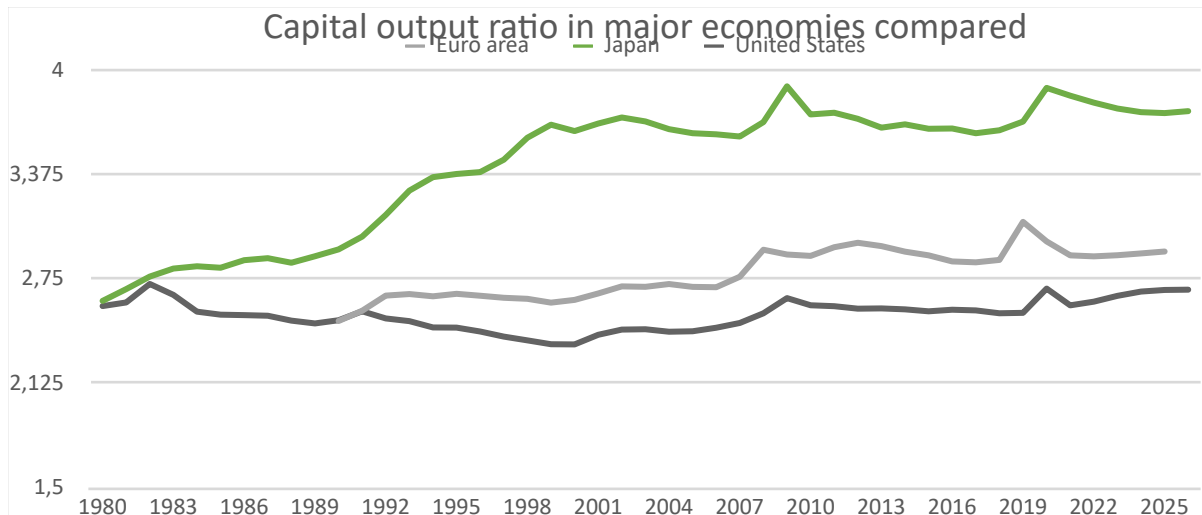
Source: IMF, WEO database October 2022.

If the euro area had a similar average investment rate as the US, but a lower average growth rate one must conclude that investment has been less productive in the euro area. The productivity of investment can be measured by the amount of capital that is needed to produce output, the capital output ratio (COR).¹⁶ The performance of the euro area has continuously deteriorated on this measure as shown in Figure 2.3 below. The amount of capital available in the euro area has been constantly increasing in relation to output and the capital output ratio remains considerably lower for the US (including for the period until 2024 for which the IMF makes forecasts).

The Figure also shows the capital output ratio for Japan, which has had much higher investment rates than both Europe or the US in the 1990s and early 2000s, but lower overall growth.

¹⁶ This measure is more stable than the 'ICOR', the incremental capital output ratio because the efficiency of investment should be measured in reference to all past investment which is incorporated in the capital stock.

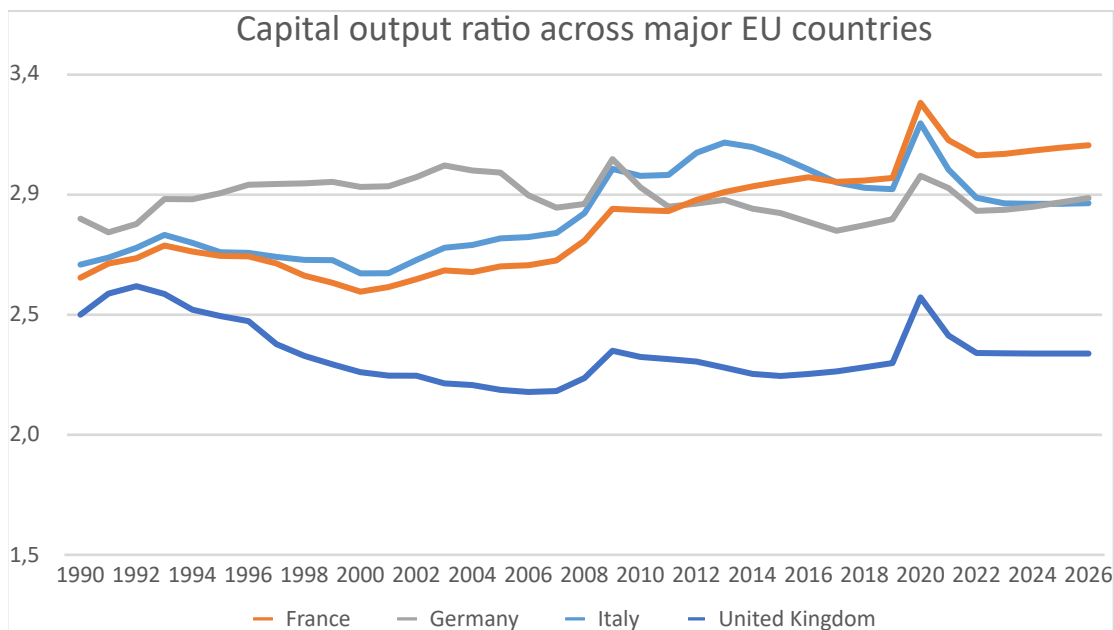
Figure 2.3



Source: IMF, WEO database October 2022

There are of course also importance differences within the euro area. In France and Italy, the capital output ratio used is lower than that of Germany, but this has changed since the financial crisis, with investment remaining subdued in Germany but growth accelerating. As a result, the capital output ratio of Germany has remained relatively constant but those of France and Italy have increased. The increase in the capital output ratio for Italy is difficult to reconcile with the argument that Italy's growth problem was due to insufficient investment.

Figure 2.4



Source: IMF, WEO database October 2022

Figure 2.4 showed that the capital output ratio of the euro area has steadily increased over the last two decades whereas that of the US has remained lower and roughly constant. This suggests that the problem of the euro area has not been insufficient investment, but rather the lower efficiency of the investment that took place.

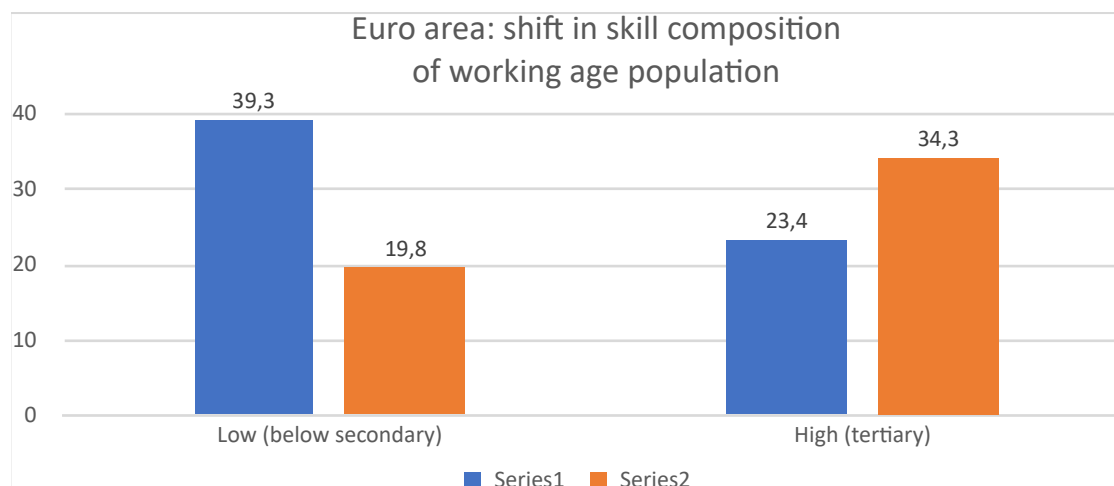
This difference could be related to the differences in capital market structures. In the US equity markets are much more important and more willing to finance radical innovation. By contrast the euro area's capital market is based much more on debt financing, the vast majority of which is bank credit.

2.1.4. Human capital

It is not widely appreciated that the level of schooling and qualification of the European work force has increased rapidly over the last decades. The share of the population with low qualifications (those without secondary, i.e. high school degrees) has declined strongly whereas the share of the those with tertiary (University degrees) has increased correspondingly (the share of the middle level has remained roughly constant). Better qualifications should, in principle, increase productivity. But this has not happened.

The educational upgrading of the work force of the euro area is illustrated in Figure 2.5 below which shows the proportion of the working age population (20-65) that was low skilled and high skilled in 2000 and 2021. The low skilled are defined as those without secondary education. They amounted to almost 40 % of the working age population in 2000, but only 23.4 % in 2021 (and this proportion is destined to continue to decline). Over the same period the share of the high skilled (those with tertiary education) increased from below 20 % to 34.3 %. The increase in the share of the high skilled of about 14 percentage points is very close to the fall in the share of the low skilled of around 15 percentage points. This implies that the middle level (those with secondary, but no tertiary) remained roughly constant at somewhat more than 40 %.

Figure 2.5



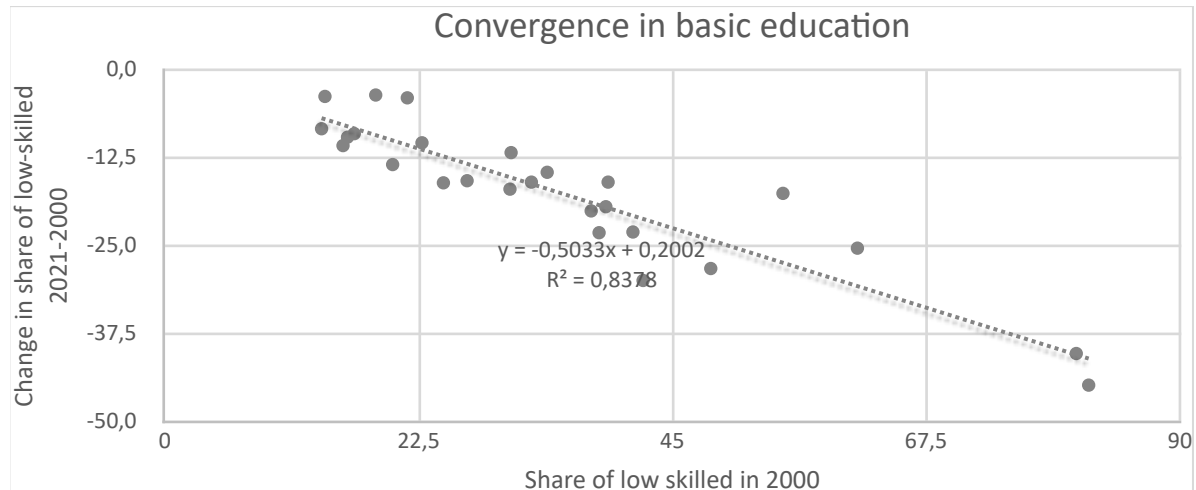
Source: Eurostat

Moreover, there has been also considerable convergence in education levels across the EU (and the euro area). Those countries with the highest share of low-skilled in 2000 saw also the highest reduction over the next 20 years, see Figure 2.6 below.¹⁷ In countries like Germany and the Netherlands, which had already a low share of low skilled in 2000 their fall

¹⁷ One does not observe a similar convergence for the high skilled. This suggests that a declining share of low skilled at first translates in a higher share of the middle level.

(and the increase in high skilled) has been much lower than in countries like Spain, where the low skilled accounted for over 60 % of the working age population in 2000, but only 36 % in 2021, a fall of 23 percentage points. In this limited sense Northern European countries are losing one competitive advantage.

Figure 2.6



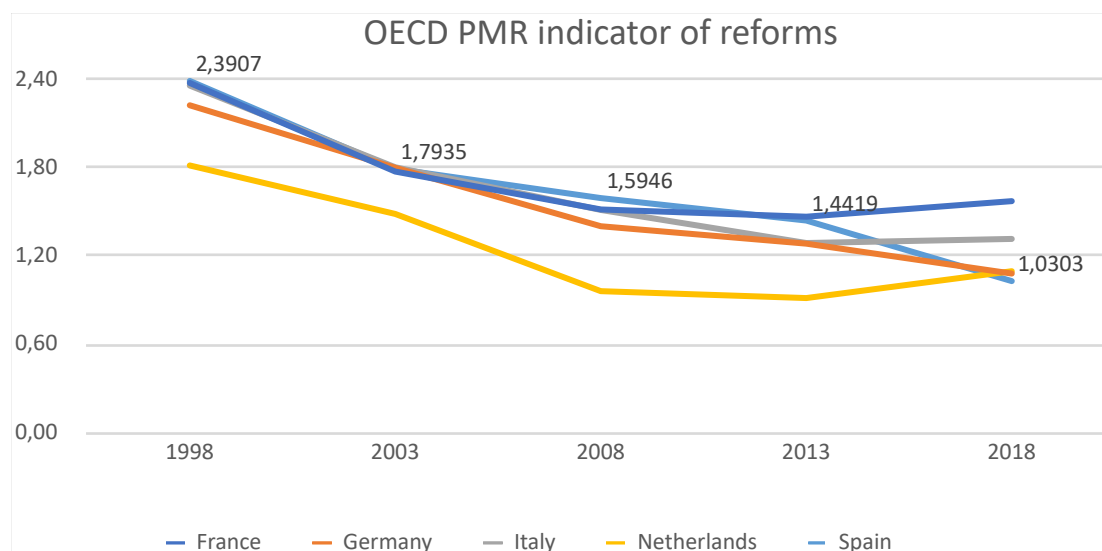
Source: Eurostat.

2.1.5. Reforms

There is no indication the euro has discouraged structural reforms. The OECD measures every five years the degree of which government intervention distorts markets (especially product markets). According to this indicator most euro area countries have made considerable progress since the start of EMU. Figure 2.7 below shows the evolution of this indicator from 1998 to 2018 for the five largest economies of the euro area. A lower value of the indicator implies fewer restrictions, i.e. market opening reforms.

It is apparent that all countries have made progress, which reversed partially after 2013 only in the case of France and the Netherlands. But all euro area countries show considerable progress since 1998. The Netherlands had the best indicator until 2013, but by 2018 it was level with Germany and Spain.

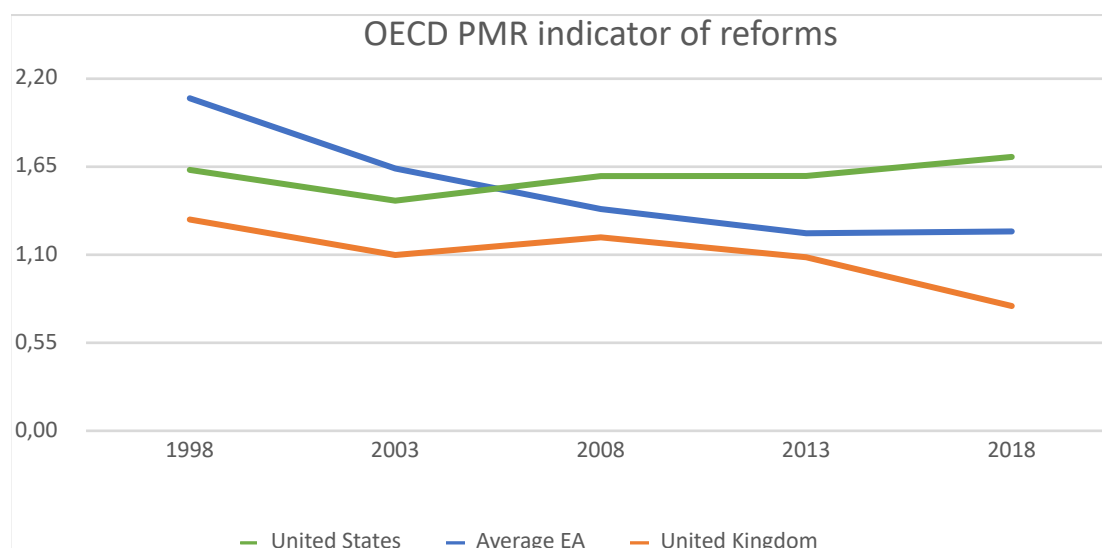
Figure 2.7



Source: OECD, <https://stats.oecd.org/index.aspx?DataSetCode=PMR>

The continuing reforms in the euro area are in contrast with the experience of the US, whose PMR index slightly worsens during this 20-year period. In 1998, i.e., at the start of EMU the US economy was less regulated than that of the average euro area, but by 2018 this has changed. The US has now more regulations than the euro area.

Figure 2.8



Source: OECD, <https://stats.oecd.org/index.aspx?DataSetCode=PMR>

This observation is difficult to reconcile with the perception that the US is more dynamic than old Europe because its economy is freer. This perception seems to be wrong since, as shown above, the overall growth performance of the euro area has been very similar to that

of the US. What remains, however, is the question why the growth rate of the euro area fell while governments undertook many reforms (Gros (2016)).

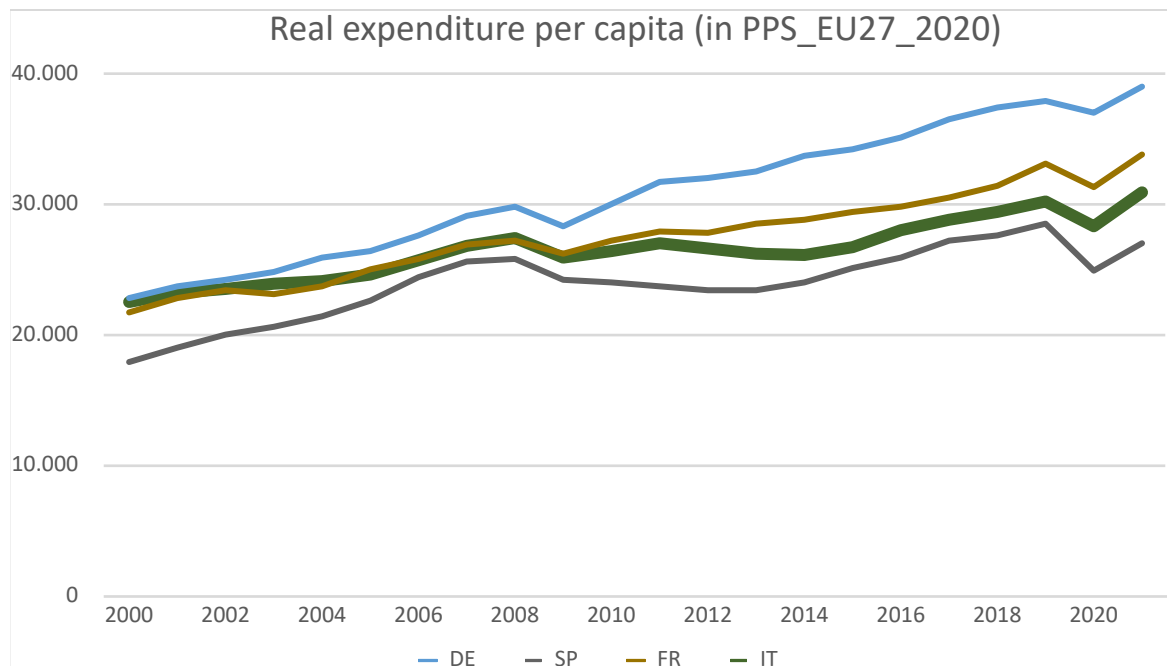
A comparison with the UK does not help to resolve this mystery of the absence of an impact of market liberalization on growth. The UK has had fewer market restrictions than the average euro area throughout this entire period, but its growth performance was worse than that of the euro area (or the US).

There is thus no indication that somehow the euro dampened reform efforts or investment in physical and human capital.

2.1.6. Convergence?

A common criticism of the euro area is that it has not fostered convergence. This critique is based on the observation that Greece has seen a large absolute fall in GDP and the growth rates of other countries, like Italy and to some extent Portugal were lower than that of the rest of the area, or the entire EU. Figure 2.9 below illustrates the divergence among the four largest euro area economies. Three of them (IT, FR and DE) started EMU with very similar levels of income per capita (at PPP), but over time they diverged with Italy clearly lagging behind. Spain remained at the bottom throughout.

Figure 2.9

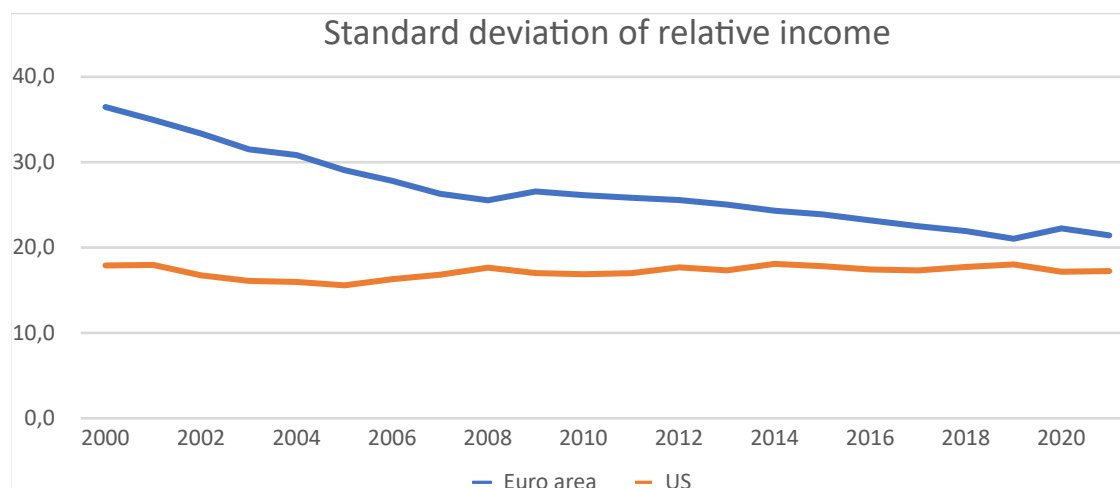


Source: European Commission, AMECO database.

However, if one looks at the standard deviation of relative real incomes (i.e. adjusted for the cost living) across the entire euro area in Figure 2.10 one finds that the standard deviation across euro area member states has fallen by almost one half since the start of EMU. The Figure also shows the standard deviation across the US, which has been flat over the last two decades. The euro area has made so much progress that the dispersion within is now at a similar level as across the US.

One can thus conclude that while it is true that there has been no convergence among the 'old members', i.e. North-South, there has been strong convergence in real incomes East-West, with many of the newer euro area member from Central and Eastern Europe converging quickly while inside the euro area (and even before they became formal members but were de facto part of EMU because their currencies were tightly pegged to the euro). There is thus no sign that euro area membership has impeded convergence where it was based on strong fundamentals.

Figure 2.10



Source: European Commission, AMECO database and BEA for the US. N.b. income measured at PPS (purchasing power standard). US without DC and Alaska. Euro area without Ireland and Luxembourg whose GDP data is distorted by profit shifting from large multinational enterprises.

The difference between this picture of convergence and the prevalent view of divergence in the euro area is that three large countries underperformed relative to the euro area average (FR, IT and SP). Together with Greece these are also the countries with the highest debt ratios and worst trajectory of public debt over the last decade. It is this combination of low growth and high debt which constitutes the Archilles heel of the euro.

A number of the New Member States in the euro area have continued high growth rates even after they passed the level of 'old' member states like Greece and Portugal, despite having also experienced very deep financial crisis. One key factor allowing them to overcome the effects of financial crisis more quickly might have been the much lower starting level of public debt, an aspect that will be described below.

2.1.7. Conclusions on the growth record of euro area

A first result is that the growth performance of the euro has been similar to that of the US if one adjusts for demographic factors. This is maybe what one should have expected given that monetary policy, which was unified under the euro, is not the most important determinant of growth (as long as price stability is maintained).

There has also been considerable convergence across member states within the euro area, but mainly East-West, not North-South. There is thus little indication that the euro in general has impeded convergence.

A second result is a mystery: Over the last two decades of the common currency, the 'old' member countries have undertaken many reforms, enterprises have kept investing and the qualification of the work force has improved. All this should have increased growth and productivity – but this has not happened.

Investment rates (gross fixed capital formation as a % of GDP) have been roughly similar in the US and the euro area. But the US economy grew quicker, implying that the same amount of investment was associated with more growth. One conclusion would be that the efficiency of Europe's capital markets to select investments needs improvement.

The OECD indicators of reforms show that EU countries now have a lower degree of government intervention and regulation in the economy than the US. This should also have increased growth. Moreover, the workforce has also become more skilled in the euro area. The low returns from this combination of reforms and a considerable improvement in the educational attainment are more difficult to explain. But the introduction of the euro is unlikely to have played a role because the macroeconomic problems that arose during the sovereign debt crisis should have led to a loss of employment and investment. But these two factors did not constitute a brake on growth, it was the low productivity of the considerable investment and employment growth that did take place.

This analysis has concentrated on the past 20 years. It would be difficult to replicate the same growth model indefinitely into the future as two of the levers used in the past (increasing employment among the elderly and increasing capital intensity) are likely to run into decreasing returns. The same might also imply to structural reforms as a large part of the 'low hanging fruit' has already been picked.

2.2. External adjustment within EMU

Discussions in the economics about monetary unions centre usually about the problem how countries can react to external shocks when the exchange rate is fixed (Mundell 1961)¹⁸. This issue arose in very concrete way right from the start of EMU.

When exchange rates were 'irrevocably fixed' at the start of EMU there was considerable anxiety in Germany that the DM rate of conversion was too strong, and that Italy had entered with an unfair competitive advantage (Sinn 1996 and 2007)¹⁹. At the time Germany had one of the weakest economies, combining low growth and a current account deficit, while Italy and France were running surpluses.

This weak position of Germany was due to the lingering effects of German unification which had led to a boom in domestic demand, especially in the construction sector and inflationary

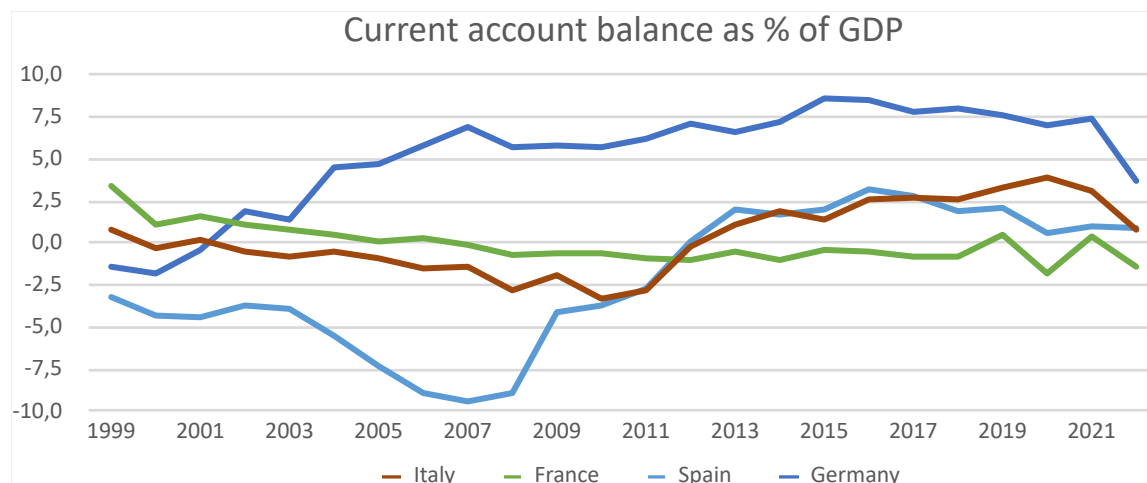
¹⁸ Mundell, R. A. (1961).

¹⁹ Sinn, H. W. (1996).

Sinn, H. W. (2007).

pressures. As a result, Germany had been running a current account deficit for almost 10 years. By 2000 the construction sector was shrinking, weakening the economy but wages were still too high for exports to make up for the lack of domestic demand.

Figure 2.11



Source: European Commission, AMECO database

The first 10 years of the euro saw then a gradual strengthening of the German economy with exports growing quickly due to 'wage moderation' in Germany, as it was called then. But another issue arose as peripheral countries like experienced massive capital inflows. Spain in particular saw its current account deteriorating as it experienced a construction boom which was even more extreme than the one occasioned by German unification spending. At the peak of the boom (2007/8) the external current account deficit of Spain reached almost 10 % of GDP (like that of Portugal and Greece). When the bubble burst, the adjustment was very costly in terms of lost output and unemployment. The loss of demand from the construction sector could not immediately be offset by higher exports, thus requiring a reduction in domestic demand and employment.

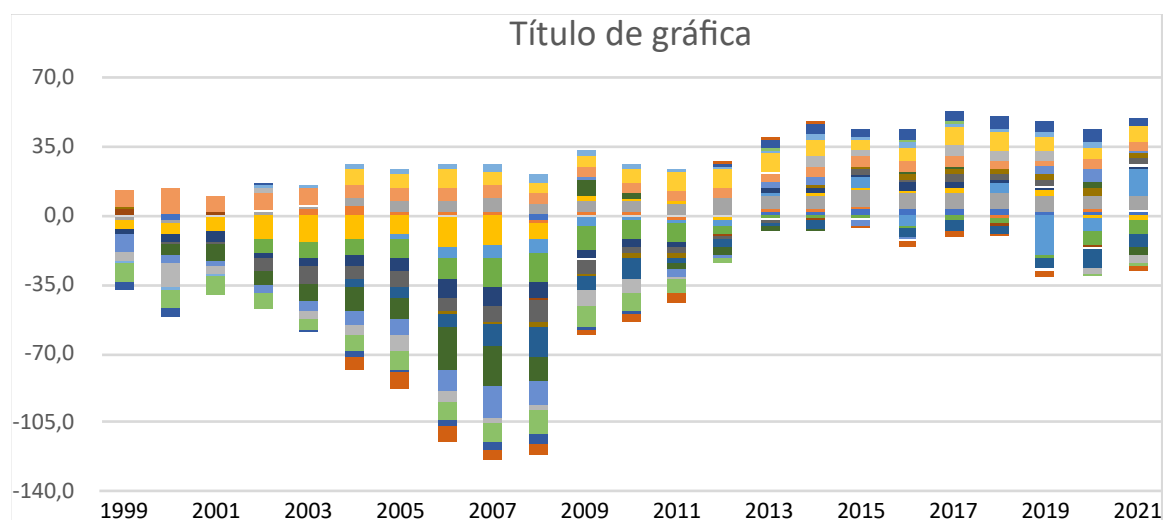
In retrospect, the adjustment was relatively quick as the current account improved rapidly and for Spain within 5 years it was back in balance. However, unemployment took much longer to fall back.

Italy's external accounts never deteriorated much (peak deficit of only 3 % of GDP) and when the economy weakened during the financial crisis period the external accounts improved rapidly so that Italy has been running sizeable current account surpluses (around 3 % of GDP) throughout the last decade. Italy thus has achieved by now a small positive net foreign asset position which makes the country a small creditor. (Foreigners hold a lot of Italian government debt, but Italian households and companies hold even large claims on foreign governments and companies.)

The absorption of the external disequilibria that arose during the first decade of the euro was not limited to these four largest economies of the euro area. Figure 2.12 below shows the external current accounts of the 19 euro area members (before Croatia joined). The

increase in the negative values during boom years up to 2007/8 shows how a large number of euro area countries started to run large deficits but most of this were reversed by 2012/3.

Figure 2.12



Source: European Commission, AMECO database

The overall conclusion is that external adjustment in the euro area works; even large disequilibria can be eliminated within less than half of a decade. But the process is very costly in terms of unemployment. The 'competitive disinflation' process is especially painful for countries subject to a sudden stop of capital inflows. The adjustment works essentially through the labour markets, which are often not as flexible as needed for a quicker adjustment, but it does not need explicit government intervention.

There is thus a key difference between external adjustment and fiscal adjustment. External disequilibria can be corrected by market forces (provided governments do not actively try to interfere). But the correction of fiscal (i.e. internal) disequilibria requires government action. Markets can only provide signals in the form of risk premia. It depends on the government whether it reacts appropriately to these signals.

2.3. Public debt: Was the Stability Pact toothless?

The Stability and Growth Pact (SGP) had been central to obtain German consent to giving up the DM (Hoekstra et al. 200).²⁰ Its purpose was to ensure declining debt levels by keeping deficits below the 'reference value' of 3 % of GDP.

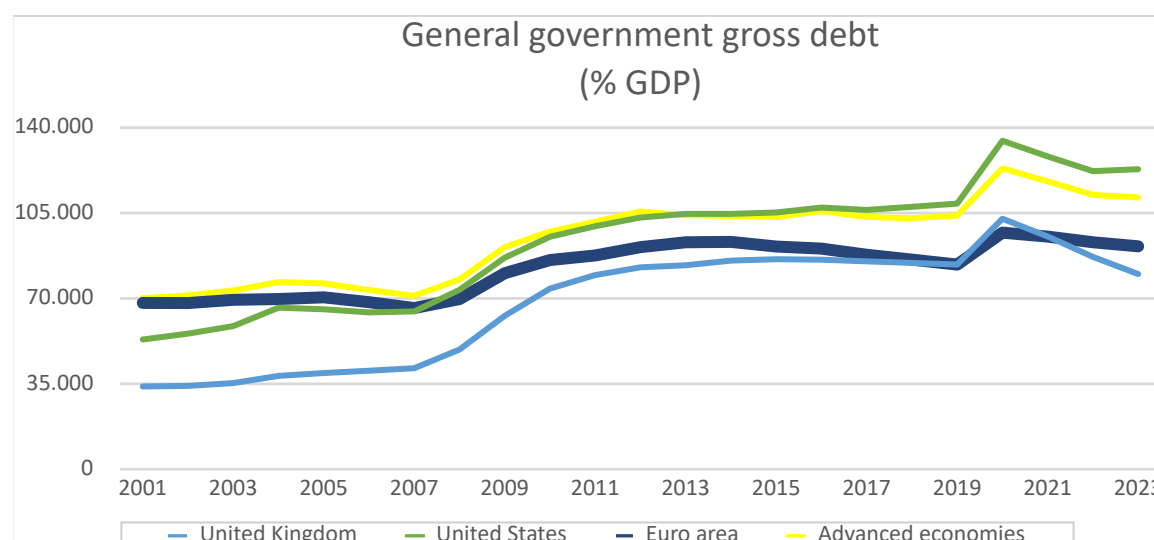
²⁰ Hoekstra, R., Horstmann, C., Knabl, J., Kruse, D., & Wiedemann, S. (2007). *Germanizing Europe? The evolution of the European Stability and Growth Pact* (No. 24). Arbeitspapiere für Staatswissenschaft.

The Stability Pact is widely regarded as toothless (Antenbrink and de Haan (2003), Heise (2013)²¹). No fine has ever been imposed although the reference value of a deficit of 3 % of GDP more often been breached than observed. Moreover, few countries have implemented the deficit reduction rule added ten years ago. Even apart from the absence of any sign of tough enforcement, critics of the SGP (in its various vintages) can point to the fact that the debt to GDP ratio in the euro area has increased, instead of declining since the start of EMU. When the euro was introduced the debt ratio stood at about 70 %, as of end-2022 it has risen to 92 %, an increase of over 22 percentage points.

A very different picture emerges when one looks at the debt record of the average of the euro area in relative terms. Despite the non-enforcement, the euro has done better than its peers.

Figure 2.13 below shows the ratio of general government debt to GDP for the euro area as well as the UK and the US and the average of all advanced economies. It is apparent that the euro area started out a (average) debt ratio about equal to that of all advanced countries, but higher than either the UK or the US. This changed over the next 20 years. Today the euro area's debt ratio is much lower than that of the US and the distance to the UK has been much reduced. Compared to Japan (value not shown because it would be off the scale) the euro area has of course even better. In short, the euro started off the major economy with the highest debt level and has now one of the lowest.

Figure 2.13



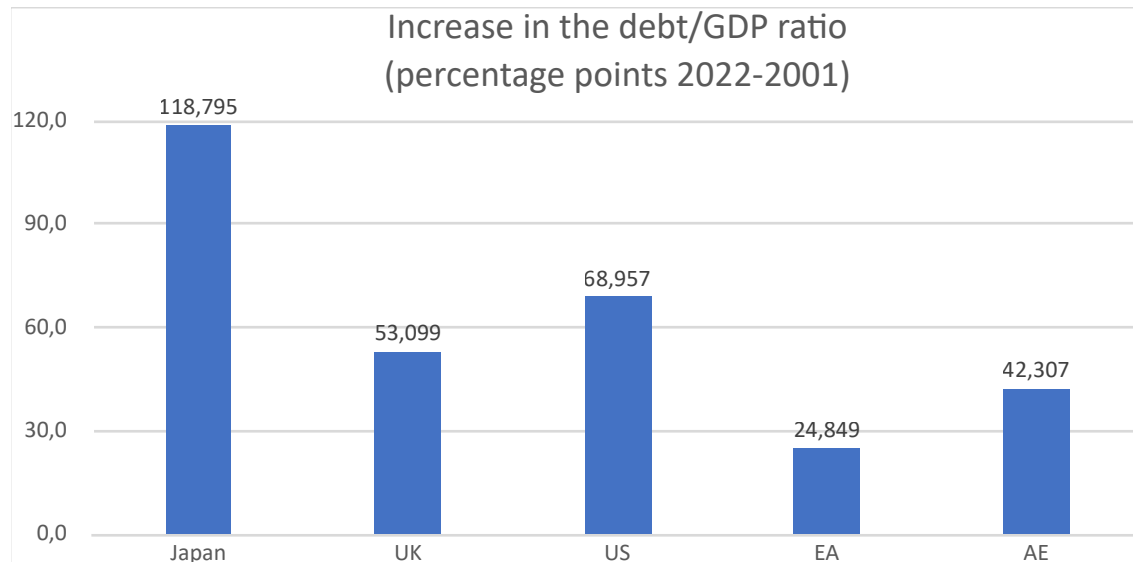
Source: IMF, WEO database, October 2022.

²¹ Heise, M. (2013). What Went Wrong with Public Debt and Macroeconomic Stabilization?. In *Emerging from the Euro Debt Crisis* (pp. 51-65). Springer, Berlin, Heidelberg.

Antenbrink, F., & De Haan, J. (2003). Economic governance in the European Union: Fiscal policy discipline versus flexibility. *Common Market L. Rev.*, 40, 1075.

Figure 2.14 below shows the increase in the debt ratio (between 2022 and 2001 because the IMF WEO data for the US start only in 2001). The euro area had by far the lowest increase in the debt ratio, whether compared to the US, the UK, Japan, or all advanced economies.

Figure 2.14



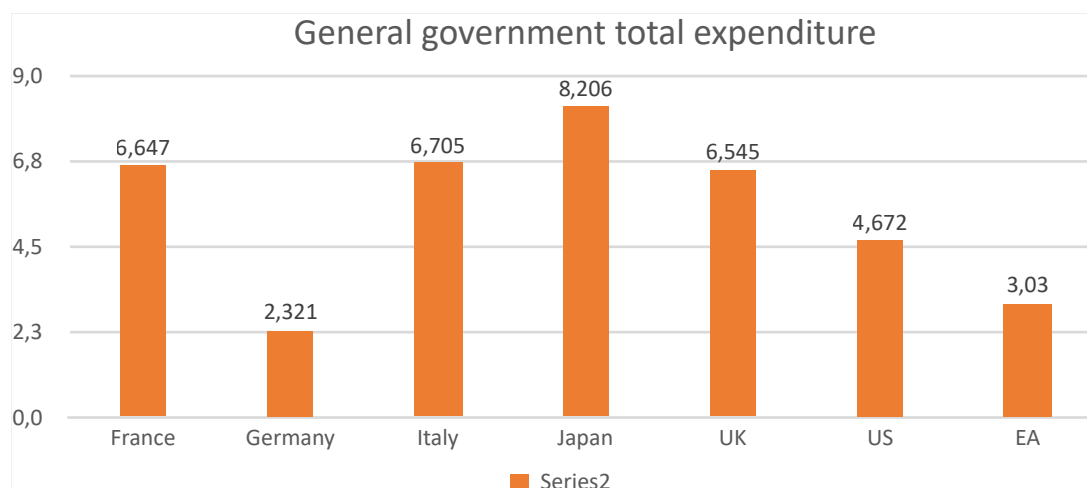
Source: IMF, WEO database, October 2022

One can thus argue in defense of the SGP that it might have had a moderating impact on deficits during the last 20 years which saw a strong pressure on government budgets throughout the world. The reference values of 3 % (deficit) and 60 % (the debt level) might thus not have been observed as strict limits, but at least the 3 % became a key reference point for public debates about fiscal policy.

Something similar emerges if one considers the time path of overall general government expenditure (as percentage of GDP, which is the best indicator of the future need for taxes). Here again the euro area shows the lowest increase since 2001, less than one half of that of Japan or the UK and considerably lower than even the US (Figure 2.15 below).

The euro area remains of course an area of with a much higher expenditure to GDP ratio than the UK, the US or Japan (48 % of the euro area average, against about 38 % for these three comparators), but the distance is now much smaller than 20 years ago.

Figure 2.15



Source: IMF, WEO database, October 2022.

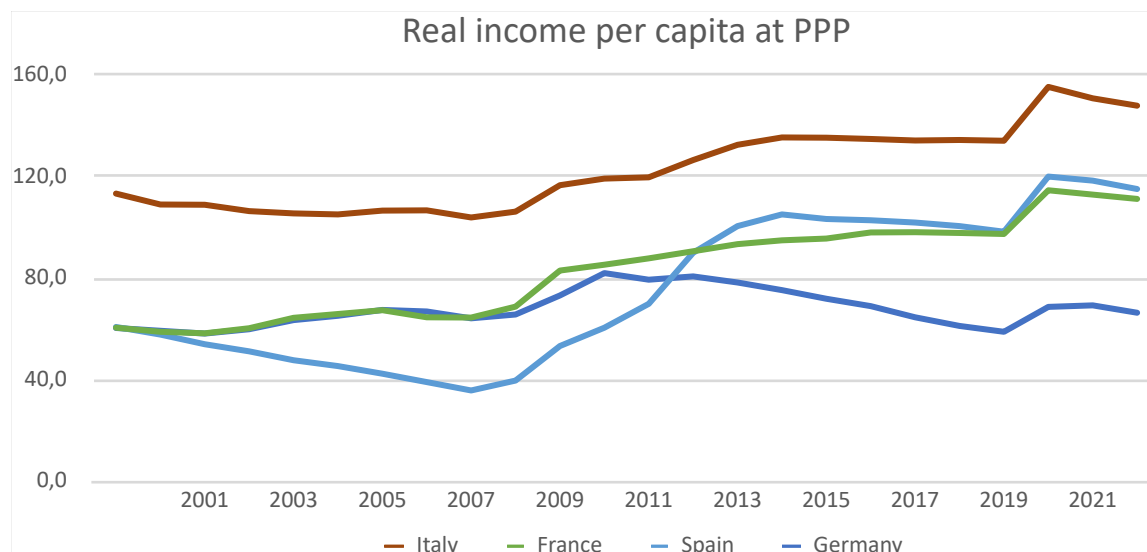
2.3.1. Divergent fiscal trends within the euro area and a scenario for 2030

The relatively good performance of the euro area in terms of the average debt to GDP ratio hides of course today's key problem, namely the divergent fiscal positions across member countries.

Figure 2.16 illustrates this by showing the debt ratio for the four largest EMU countries (DE, FR, IT and ES). Each of these four could be considered of systemic importance. At the start of EMU three of the four had almost exactly the same debt ratio of 61 % of GDP, with only Italy about 50 percentage points higher at 113 % of GDP.²² By 2022 the difference between the lowest value (Germany versus Italy) had increased to about 80 percentage points (and both FR and SP had reached the level of Italy 20 years ago).

²² As an aside we note that up to 2007 there was essentially no risk premium in euro government debt markets. But during this period of no market signals, Italy and Spain reduced their debt ratios, whereas those of Germany and France increased (in parallel). The increase in the debt ratios of Italy and Spain started with the crisis, i.e. exactly when market signals were very strong.

Figure 2.16



Source: European Commission, AMECO database

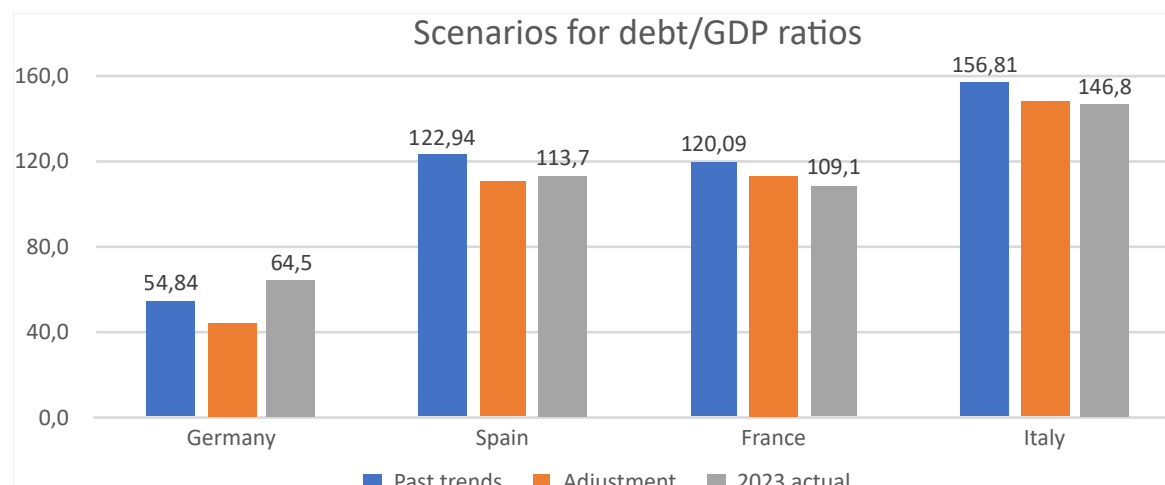
The first twenty years of the euro have thus been characterized by divergence in public debt ratios – at least among the largest member countries. The difficult question is then whether this trend will continue to operate, potentially endangering the euro. One way to tackle this question is to extend the trend over the last decade forward to 2030. This is done in Figure 2.17 below, which shows for the largest 4 member states the actual debt ratio (as expected for 2023 and the one calculated by just prolonging the past ten years (bars labelled past trends). The Figure also shows the debt ratios (orange bars) that would be reached if starting from 2023 these countries followed the same adjustment path as during the period 2013-2019 during which some progress was made in reducing debt levels. For Italy, the difference between today and the negative scenario would be 10 percentage points (156 % in 2030 versus 146 % of GDP today). For France and Spain, the deterioration would also be close to 10 percentage points of GDP whereas past trends suggest for German an improvement of the debt ratio of the same amount.

There are thus two main messages from this simple exercise:

1. A prolongation of past trends would increase divergence inside the euro area.
2. The difference between today and a negative scenario based on past trends is not that large and that a repeat of the adjustment effort of the pre-Covid period, would not make a big difference either.

The broad conclusion is that high debt levels will remain a problem for a long time if the patterns which have characterized the evolution of public debt in the major euro area countries over the last decade are not decisively broken.

Figure 2.17



Source: European Commission, AMECO database.

Debt ratios above 120 % led to serious financial tensions during the sovereign debt crisis of 2011/2. Today's financial markets seem to be willing to finance such ratios as very low risk premia. One reason for this is that nominal and real interest rates have fallen considerably over the last ten years. A key issue for the sustainability of these high debt levels is then the evolution of interest rates over the next decade.

The large debt incurred during the Corona crisis was financed still at low interest rates. The additional debt to finance energy related support measures during 2022/3 is already more costly in terms of interest rates. However, the bulk of existing public debt has been issued over the last ten year of low rates, and, with average maturities of around 7 years, debt service will remain under control. However, existing debt will have to be gradually re-finance at higher rates over the next years. The sustainability of public finances of highly indebted countries will thus depend on the path of interest rates over the remainder of this decade.

2.3.2. Implications of divergent debt ratios

In a negative scenario one could thus combine higher debt ratios (along the path over the last 10 years) with higher interest rates. This could lead to considerable tensions by 2030 because by that time most of public debt will have been refinanced at higher rates, thus increasing the burden of interest payments, which until now had been declining for most euro area countries.

Broadening the analysis beyond the four largest euro area countries confirms the picture of ongoing divergence. Extrapolating the last ten years for all euro area member states yields the result that only 4 countries end up with debt ratios above 120 % of GDP in 2030, but these four (FR, ES, IT and GR) account for 46 % of the GDP of the euro area. Under this scenario there would also be 8 countries with a debt ratio below 60 % (DE, NL, MT, LUX plus IRL and the Baltics), accounting for about 42 % of euro area GDP. The two extremes would thus be much larger than the middle ground, which accounts for only 12 % of euro area GDP.

With this concentration at the extremes there are likely to be tensions over the appropriate monetary policy in case interest rates and risk premia remain high. The concern about rising debt levels is amplified by the fact that risk premia are usually a function of the debt level itself, thus magnifying the cost of high debt levels. Alcidi and Gros (2019) show how this can lead to a dangerous doom loop.²³

Countries with high debt levels and under pressure from markets will exert pressure on the ECB to either keep rates low or to remain active in the market for public debt. Most other countries might object to this policy direction. These differences in perceived interests have so far been much muted by the fact that bond-buying and low interest rates were appropriate in a low inflation environment. This has changed radically for now and the ECB has had to start reducing the bond holdings acquired under the PSPP and PEPP, but it is constrained by the concern about the stability of the public debt markets for the highly indebted countries.²⁴

2.3.3. Implications for the reform of the Stability Pact

The analysis of the evolution of public debt over the last two decades suggests that the SGP has not been observed to the letter, but that the existence of some fiscal rules has nevertheless had some impact, leading to a lower debt accumulation than observed in other advanced economies. The Fiscal Compact imposed the creation of Independent Fiscal Institutions at the national level (and productivity boards²⁵). But the impact in terms of strengthening national economic institutions has been limited (Schout 2020).

This is the context one needs to take into account when judging the repeated reforms of the SGP.

A first reform came already a few years into EMU, following the refusal of Germany to apply the then simple rules to itself. As mentioned above, the German economy was during that period still weakened by the lingering effects of unification and the state was running in 2002/3 a deficit slightly above 3 % of GDP as the European economy weakened after the bursting of the dotcom bubble of 1999/2000 and the 2001 attacks on the twin towers in New York.

The original version of the SGP had conceived a deficit of 3 % of GDP as an absolute upper limit on the understanding that countries should aim for a balanced budget during good times so that the 3 % margin would be more than sufficient for anticyclical policies. However, Germany, and some other countries, had not maintained this safety margin and the German deficit went slightly to 3.9 3 % of GDP (today's revised data, the real time estimated deficit was somewhat lower). Italy and France, which were in a similar situation, with headline deficits slightly above 3 % of GDP joined Germany to block a Commission proposal to ratchet

²³ Alcidi, C., & Gros, D. (2019).

²⁴ Alberola, E., Cheng, G., Consiglio, A., & Zenios, S. A. (2022).

²⁵ For an official description of their roles see https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/fiscal-frameworks-eu-member-states/independent-fiscal-institutions_en and https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/national-productivity-boards_en

up the excessive deficit procedure against Germany at a Euro Group meeting of November of 2003. At the time the Commission stuck to its role as the guardian of the Treaty and pursued the Council at the Court of Justice. The stand-off was resolved only in 2005 with an agreement on a reform, which introduced the cyclical adjustment in the deficit calculations. Implicit in this reform was that the ideal of a balanced budget in good times was abandoned.

Further reforms followed in 2011 to take into account further elements, like investment. Another reform in 2013 strengthened the role of the Commission by introducing the reverse majority principle. To prevent a repeat of the 2003 episode, a proposal of the Commission was considered to be adopted unless it was blocked by a qualified majority in the Euro Group. Moreover, the Commissioner for the economy was given a special independent role within the Commission itself.

The present system is thus characterized by a complex set of detailed rules, some attempts at strengthening a subsidiarity-based model, and a central role of the Commission as enforcer and interpreter of the rules. However, the Commission has changed greatly over the last two decades. The range of tasks it deals with has expanded greatly and it sees itself overtly as a “very political” institution (Juncker 2014, Dinan 2016, Pansani and Tortola 2022).²⁶ A political Commission is unlikely to feel bound by the conservative view of fiscal policy underlying the Maastricht Treaty. It is thus unlikely to strictly enforce its rules. Moreover, a ‘geopolitical’ Commission (Haroche 2022)²⁷ would be likely to mix geopolitical and other considerations in its interpretation of the fiscal rules.

The recent proposal by the Commission is to substitute the SGP rule book with longer term “fiscal structural” plans to be negotiated bilaterally between the Commission and Member States. These plans would integrate “fiscal, reform and investment objectives”.²⁸ They would thus not concentrate exclusively on deficits and debt. This multitude of objectives makes these plans highly political and renders an objective verification of implementation even more difficult. The fiscal rules would in essence be abandoned.

At first sight, the Commission would gain in importance. But this would be largely an illusion because it would have little negotiating power in negotiations with Member States, especially the larger ones. There is little the Commission could do if, for example, the French government insists that it cannot be asked to reduce its debt ratio because it needs deficits to finance investments and to buy support for reforms. It is not even certain that a political Commission (depending on the parties on whose support it counts and possibly even on the size of a country) would push for fiscal adjustment.

²⁶ Dinan, D. (2016). Governance and institutions: A more political commission. *Journal of Common Market Studies*, 54, 101.

Pansardi, P., & Tortola, P. D. (2022). A “More Political” Commission? Reassessing EC Politicization through Language. *JCMS: Journal of Common Market Studies*, 60(4), 1047-1068.

²⁷ Haroche, P. (2022). A ‘Geopolitical Commission’: Supranationalism Meets Global Power Competition. *Journal of Common Market Studies*.

²⁸ European Commission “Building an economic governance framework fit for the challenges ahead”, November 2022, https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6562

Enforcement via the Excessive Deficit Procedure (EDP) would be even more politicised because any appraisal would depend on the relative importance of the attainment of fiscal objectives versus reforms and investment. Formally it would be up to the Commission to judge these trade-offs if it is not satisfied with the implementation and considers starting an enforcement action.

The key argument behind this proposal is that the negotiations of these fiscal- structural plans would ensure national ownership of the adjustment agreed adjustment path.²⁹ However, this hope might be mistaken since governments change and new governments have different priorities and little ownership in the plans agreed by their predecessors. Moreover, each year brings changes in the economy which can motivate changes in policies. The plans might thus have to be re-negotiated frequently.

What remains is a general dissatisfaction with the SGP because the rulebook has become too complicated and enforcement too politicised (and too hierarchical). The latter problem needs to be addressed first because the details of the rulebook become irrelevant when there is no, or a politicised, enforcement. Even apart from the natural tendency of any bureaucratic institution to seek more power, the trend towards a more political Commission seems unavoidable given the nature of the challenges facing the EU in an ever more uncertain and threatening global environment. The Commission is thus no longer the best institution to interpret and enforce fiscal rules.

A first reform step would thus be to transfer the enforcement function of the SGP to the European Fiscal Board (EFB) who should collaborate with the national independent fiscal institutions (IFIs) (see Chapter 5). The five members of the EFB are at present nominated by the Commission, which does not ensure their independence. One way to increase the independence of the EFB would be to reduce the number nominated by the Commission to 3 and allow the IFIs to nominate an additional – at least - four members also with a view to strengthen a culture of independent supervision in the member states. Moreover, the EFB would call on national IFIs to contribute to the evaluation of other countries and be paid for its services. This will also strengthen the financial independence of the IFIs and help to broaden their financial basis making it possible to work with qualified personnel (Schout 2020). This subsidiarity-based way of working with highly qualified IFIs involved at the EU level would be part of the reinforcement of supervision in national governments. The ultimate judgement of whether a country is in breach of the fiscal rules would thus result from a collective judgement of independent experts (Schout and Schwieter 2018, Schout 2022). The ultimate decision on any fines for breaches would of course remain at the political level (the Council), but the analysis and the proposals for action should come from this subsidiarity based reformed European Fiscal Board. If the Commission remains the actor to propose may depart for political does not follow the

²⁹ The entire quest for national ownership is misplaced because the purpose of the fiscal rules was to provide some bounds exactly when they are politically inconvenient. The purpose of euro area fiscal rules to constrain governments whose actions might impose costs on others. If Member States 'owned' these rules all the time, there would be no need for enforcement.

Creating this European network of independent fiscal experts consisting of the EFB and the IFIs would not be a silver bullet that solves all problems. But it would be a first step to re-establish the credibility of the enforcement process.

2.4. Financial markets and the doom loop as the Achilles heel of EMU:

2.4.1. *A realist view*³⁰

The so far unresolved problem of the euro is that financial markets remain both a potential source of shocks and signals of the sustainability of public debt. Moreover, shocks to sovereign debt markets are amplified by the fact that the domestic banking system usually holds large amounts of home country debt. A fall in the value of public debt thus weakens the domestic banking system, which in turn weakens the economy and thus public finances. This is the so-called doom loop.

When the doom loop was fully operating in 2012 and some market participants expected the euro to fail soon the ECB had to step in. The famous remark by Mario Draghi that the ECB would do ‘whatever it takes’ to keep the euro together has been widely credited with avoiding this worst case outcome. This success then created the impression that only the ECB could save the euro and that the ECB is the ultimate arbiter of risk spreads, preventing costly speculative attacks or a source of moral hazard – depending on the point of view.

Reality is more complicated and nuanced than the models of speculative attacks and the doom loop suggest. Moreover, the influence of the ECB on risk spreads is more limited than often assumed.

2.4.2. *Long-term versus short-term debt and the cost of public debt*

A widespread view of the euro’s problem is that government debt in the euro area is ‘fragile’³¹ because a buyer’s strike could drive any euro area government into default, but this is not possible in countries with their own central bank. A corollary of this line of arguments is that the ECB should be ready to protect countries against speculative attacks³². But reality is more complicated than the speculative attack models, which neglect the existence of long-term debt. Models which take the existence of long-term debt into account conclude that governments can reduce the risk of speculative attacks by issuing more long-term debt during tranquil period³³.

This remains true today. Movements in short- or long-term rates have very different implications for debt service.

Policymakers’ attention is usually focussed on the ‘spread’ as measured by the difference in 10 year interest rates (with respect to the risk-less German rate). However, an increase in

³⁰ This section is based largely on Angeloni and Gros (2022).

³¹ De Grauwe and Ji (2021).

³² Gros (2012).

³³ Giavazzi and Pagano (1999).

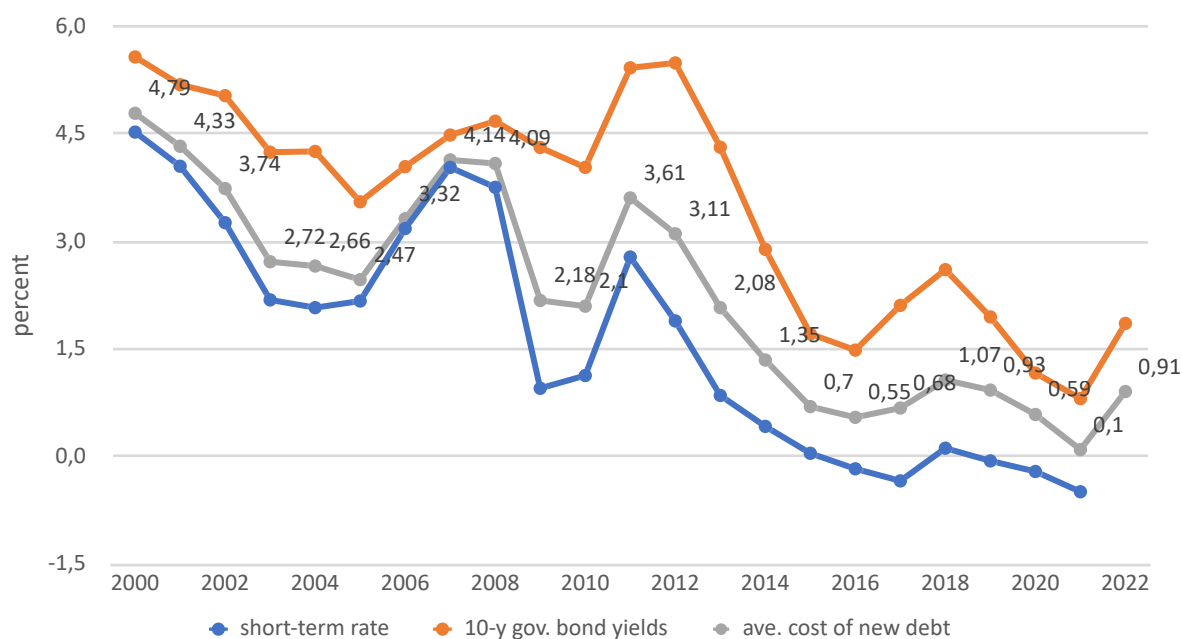
short-term rates can be more dangerous not only because it signals that market participants have much more immediate concerns, but also because higher rates on short-term debt translate much more quickly into higher interest payments and thus potentially a debt spiral (more so if the debt maturity is shorter).

Two-year bonds must be rolled over five times as quickly as 10 year bonds. A one percentage point increase in the two year rate thus translates into a higher interest burden five times quicker than the same increase in the 10 year rates, which are usually taken as the benchmark.

Increases in three-month T-bill rates translate even quicker into higher interest payments.

The importance of this can be seen by considering the actual average cost of Italy's new public debt as shown below. For example, in 2018, the average cost of new debt was only 1.07 % while the 10 year spread was hovering around 250-300 bps for most of the year. The reason was that the short-term rate had barely increased, as can be seen below in Figure 2.3. The overall cost of debt is determined by a weighted average of short and long-term rates and thus remains usually well below the long term rates.

Table 2.3 The average cost of debt versus short- and long-term interest rates on Italian sovereign bonds



Source: FRED, Italy's Ministry of Economics and Finance, https://www.dt.mef.gov.it/it/debito_pubblico/dati_statistici/.

Another reason why short-term rates constitute a key signal is that they are crucial for the inter-bank market. Even a small increase in the inter-bank rate can result in large losses and a quick loss of access to the inter-bank market because this is a market which does not tolerate risk.

2.5. Flattening the risk curve as a key danger signal

A key warning signal in 2011-12 was not so much the high 'spread' in terms of higher long-term interest rates for all southern European euro area members (the co-called PIGS), but the fact that short rates spreads spiked during the peak of the crisis.³⁴

When asked what signal had convinced the ECB that a strong intervention was need Mario Draghi responded in August 2012

*"I would not point to one single episode but certainly one thing, if one really wants to, was the sudden increase in the shorter part of the yield curve for several countries in the euro area, which for people who know the markets is usually ominous."*³⁵

Other ECB sources³⁶ confirm that this was a key danger signal for the need to intervene.

This key importance of short term rates in signalling market expectations is often overlooked. Outside a few months during the peak of the 2011/12 crisis episode short term spreads have usually stayed low, thus allowing the ECB to concentrate on its main task, namely maintaining price stability.

The key importance of short-term rates is also the reason why Angeloni and Gros (2022) conclude that the Transmission Protection Instrument (TPI) created by the ECB in July 2022 was mis-guided in its emphasis on long-term spreads.

2.5.1. Limited influence of ECB bond buying?

The time path leading to the OMT is also interesting because it reveals that even targeted bond buying by the ECB is no guarantee for tranquil markets and lows spreads. At the time (early 2012), the ECB still had the option of buying peripheral bonds under its 'Securities Markets Programme' (SMP)³⁷ which had been announced in May 2010, allowing the ECB to buy unspecified amounts of peripheral bonds to 'to ensure depth and liquidity in those market segments which are dysfunctional'³⁸.

The ECB did not specify how much it was buying under the SMP; the argument was that 'speculators' should be kept in the dark about its firepower. Only later, when the programme

³⁴ The spikes in short term rates were short enough that one cannot see them in chart 1, which shows only annual averages.

³⁵ However, Draghi added that « That (sudden increase in shorter term rates) was one sign but I would not point only to that symptom, since there were other symptoms of market fragmentation which tend to worsen the situation. » See <https://www.ecb.europa.eu/press/pressconf/2012/html/is120802.en.html>. He also added that « As to the second question on why we are focusing on the short end of the yield curve, the main reason is that this falls squarely within the range of classical monetary policy instruments. The shorter the spectrum, the closer it is to money market operations. »

The first point is very important because we want to repair monetary policy transmission channels and we clearly see a risk, and I mean the convertibility premium in some interest rates.

³⁶ ECB (2013).

³⁷ ECB (2010).

³⁸ Idem.

had been terminated, the amounts bought under the SMP were published (several hundred billion of the bonds of Greece, Italy Portugal and Spain).

The SMP had evidently not been sufficient to stem market turbulences, which actually increased in 2011 and 2012, so that at one point, Italy's yield curve was almost completely flat. A flat yield curve (at a high-risk premium) signals that investors expect an imminent restructuring because in most restructurings the residual maturity does not matter because all bonds in default are treated as one mass.

This forced the ECB to consider more drastic measures. Only an explicit commitment to the euro backed by potentially unlimited interventions could save the day when the flattening of the yield curve signalled increasing expectations of a near term default. The OMT announcement had a strong impact although formally the OMT had more restrictive conditions than the SMP. Under the OMT the ECB pledged to intervene only if the country accepted an ESM program while under the SMP the ECB did undertake large purchases even without a program. The failure of the SMP suggests that ECB purchases have little impact if they are not seconded by adjustment efforts of the country itself. The longer-term success of the OMT announcement was thus not due only to the announcement itself and the implicit guarantee against a break-up, but perhaps even more due to the considerable adjustment efforts undertaken across the peripheral countries. The external current account deficits, and thus the need for external finance, disappeared quickly throughout the periphery and public finances also improved with the deficit falling from over 10 % of GDP (in Spain) to less than one half. In Italy the fiscal deficit fell to below 3 % of GDP.

This view is compatible with the fact that, as shown by Angeloni and Gros (2022), that short-term spreads fell quickly, after the Draghi speech and the announcement of the OMT; much more quickly than the long-term one, which declined more gradually over the next years. Fears about the immediate break-up of the euro disappeared quickly, but the reduction in external and fiscal deficits necessary to re-establish some confidence took more time. Angeloni and Gros (2022) also show that up to 2014-15, the Italian and Spanish curves show a similar pattern. However, in 2018-19, the two curves clearly diverged.

2.5.2. Italy 2018/9: a lesson learnt from the risk yield's evolution

In June 2018, a surprise coalition of two populist parties formed the Italian government. Their declared intention was to disregard the fiscal consolidation plan which the previous government had agreed with the EU to avoid being found in breach of the rules of the Stability Pact (deficit above 3 %, insufficient reduction of the public debt ratio).

The government also included³⁹ one prominent supporter of exiting the euro to effectively default on public debt held abroad. The reaction of the market was immediate. The long-term risk premium shot up to over 250 bps (reaching several times 300 bps). The short-term premium also went up, but somewhat less so. About one half of the increase in the risk premium could be attributed to the fear of euro exit, the so-called redenomination risk⁴⁰.

³⁹ Gros (2018).

⁴⁰ Gros (2018), vox.eu.

A key feature of this episode was that Italy's problems did not spark a systemic crisis. Spanish and Portuguese (not shown here) long-term premia were also affected, but they rose by less than half of Italy's. The Spanish (and Portuguese) short-term risk premium stayed at zero throughout this entire period.

The ECB did not intervene to stabilise the price of Italian public debt (it judged that the monetary transmission mechanism was not impaired). On the contrary, the ECB continued to lower (in July 2018) and then end (in December 2018) its asset purchases under the Public Sector Purchase Programme (PSPP). Moreover, there was no sign that an OMT was being considered, which anyway would have required the Italian government to ask for an ESM program, which was out of the question.

The ECB ended the asset purchases under the PSPP/APP in 2018 because it believed that inflation was nearing its (then) target of 'below, but close to 2 %'. This belief turned out to have been premature, forcing the ECB to resume asset purchases by the end of the following year.

2.5.3. The doom loop: Concentration of home country bonds on bank's balance sheets.

One key amplifier of sovereign risk derives from the fact that in most countries banks hold large amounts of the bonds of their own government on their balance sheets. The conventional explanation is that the reason for this is the zero-risk rating of sovereign bonds, which is a global rule, has been retained within the euro area although the experience of Greece showed that government debt within the euro is not riskless. However, here again reality might provide another explanation.

Government bonds have a highly skewed risk profile: most of the time they can be considered very low risk, but in a crisis they can suddenly become very risky. Large cross-holdings of government thus do not contribute much to risk sharing during normal times, i.e. when there is no acute stress on financial markets. Moreover, wide-spread holdings of a sovereign under stress would also distribute this stress across the entire euro area and would risk creating a euro area wide systemic risk if the debtor is large enough. Cross border holdings of government debt represent thus a double-edged sword: they distribute credit risk but increase systemic risk.

One reason for the 'repatriation' of government bond holdings in a crisis is the difference in incentives for regulated financial intermediaries that are typically large holders of government bonds, i.e. banks and insurance companies. For the managers of these intermediaries the incentives are asymmetric: In the core countries a portfolio manager would risk her job if she held a large position in the bonds of a peripheral government that gets into difficulties. The modest flow of higher interest income if there is no crisis does not outweigh this risk.

By contrast, the portfolio manager in a peripheral country does not risk her job if the home country experiences financial difficulties because all of her colleagues would be in the same situation. The higher return available on home country bonds would thus be the decisive factor for holding a large position. Even in Greece, commercial banks held on to large

positions in Greek government debt although it wiped out their capital when the government finally defaulted

2.5.4. Generalised bond buying and risk spreads

The SMP, OMT and TPI all represent instruments the ECB might use to dampen disturbances to the public debt market of any particular Member State. The impact of the SMP was limited as shown above and neither the OMT, nor the TPI have so far been put in action. However, since 2015 the ECB has engaged in massive generalised bond buying programs which involved the bonds of all euro area members.

Financial market commentary has often referred to the PSPP and the PEPP as the ultimate determinant of risk spreads for peripheral countries. However, Gros (2018) argues that the very large volumes of government bonds bought under the PSPP (and later the PEPP) has only a small impact on yields. Belke, Gros and Shamsfakhr (2021) look more closely at the impact of the PSPP on the yields and spreads of peripheral bonds. They argue that the evidence suggests that the announcement of the PSPP had only a temporary impact on risk spreads. This is also likely to hold for the PEPP.

The key reason why one should not expect the PSPP or PEPP to have a strong permanent impact on risk spreads is one simple, but key aspect of both these programs: the bond purchases were undertaken by the national central banks at their own risk. For example, the Bundesbank bought only Bunds and the Banca d'Italia bought only Italian government bonds, both central banks kept the risk of these purchases on their own balance sheet. All NCBs in the euro area transfer their profits to their national treasuries, they are thus from a fiscal point of view part of the government. This implies immediately that the PSPP and the PEPP consisted of one part of the government (the central bank) buying the debt of another part of the government (the Treasury). One would not expect such a 'left pocket - right pocket' operation to have a strong lasting impact on the risk profile of government bonds.

At any rate, the bond purchases have stopped and a gradual run-down of the stocks has been announced - without a major impact on risk spreads so far. This provides another piece of evidence that the PSPP and PEPP had probably only a limited impact on risk spreads. Going forward it is highly unlikely that the ECB will restart a generalised bond purchase program because the underlying reason, the need to stimulate the economy while policy rates are already negative, is unlikely to materialise any time soon.

The narrative that the ECB has over the last years anesthetized financial markets and kept risk spreads artificially low is thus not tenable.

3. MONETARY UNIONS, EMU AND POLITICAL REALITIES

Nothing lasts forever; and that also applies to monetary unions. Yet, history suggests a break-up of a monetary union only occurs in exceptional circumstances. Hence, even if a monetary union turns out less effective than originally perceived, it is politically and economically easier to muddle through hoping for incremental improvement than to orchestrate an exit or break-up. Saravelos and Brehon (2011) discuss 2000 years of monetary union break-ups. However, equally important than discussing break-ups is the realization that many unions have stayed together for a long time including during major internal and international upheavals such as the Belgium-Luxembourg monetary union and the Belgian fiscal union. Moreover, even when monetary unions broke up, the question needs to be posed whether this occurred due to economic incompatibilities or due to the erosion of political will.

Before dealing with the discussions on breaking-up the euro in the form of exits, a euro-holiday or a split between a Neuro and Seuro, we first look at the conclusions from two previous monetary unions in Europe: the Scandinavian and the Latin Monetary Unions.

These historical examples hold, despite their limited membership and very different economic conditions, useful lessons for the future of the euro. First of all, even an imperfect monetary union can be quite stable because neither the weak, nor the strong, members have an interest in destroying the system. Particularly the leading country is motivated to keep the union together. The availability and the roles of the Central Bank are important for the stability of a monetary union. Secondly, as regards the EU one notices that the two countries which created most tensions in the Latin Monetary Union are the same for the euro area today (Italy and Greece).

3.1. Monetary Unions 19th century

3.1.1. *The Scandinavian and Latin Monetary Unions (SMU and LMU)*

The two most widely cited historical examples of a monetary union were the Scandinavian Monetary Union (SMU) and the so-called 'Latin Monetary Union' LMU. The SMU is regarded to be one of the more successful monetary unions and was able to deal with three external shocks (Henriksen and Kærgård 1995). The end of both experiments started with the outbreak of war in Europe in 1914. Both historical examples constituted only 'partial' monetary unions as their main aim was to unify coinage and thus facilitate the international circulation of coins.

The main founding members of the Scandinavian Monetary Union (SMU) were Denmark, Sweden and Norway (Iceland joining later). The Union operated on the gold standard without major tensions between 1873 and 1914. The central banks of the participating countries even opened credit lines to each other (at zero interest rate) but there was no attempt to take advantage of this arrangement to increase domestic seigniorage revenues. The SMU does not seem to have had a measurable impact on economic development and trade which all developed well during this period.

Operating on the gold standard the SMU was not affected by the fluctuations in the price of silver, which eliminated one source of tension prevalent inside the Latin Monetary Union (LMU). Moreover, the prevalence of banknote use in Scandinavia alleviated the scarcity of gold coins. The SMU was dissolved formally only in 1924, but it de facto ceased to operate when the outbreak of the First World War forced the participating countries off the gold standard (Jonung 2017).

The LMU officially started in late 1865 between France, Belgium Switzerland and Italy (Greece joined in 1868 and the Papal State was an unofficial member). It was the British press which coined the term 'Latin Monetary Union' to ensure that it would be clear that Great Britain could never join it.⁴¹

The countries which adhered to the LMU had in general tight economic and financial relations with France. For example, Italy conducted over one fourth of its total foreign trade with France and about 35-40 % with the LMU partners overall. However, there is little evidence that the creation of the LMU stimulated trade significantly and permanently (Timini 2018). Flandreau (1995) argues that neither economic nor political motives explain the creation of the LMU. In his view, the LMU was a manifestation of a broader movement towards integration which had as its component also the German 'Münzverein' created earlier and the SMU which was founded 8 years later. A number of other countries applied to join (Austria-Hungary, Romania, Balkan countries, etc.). But their applications were vetoed by France because these countries did not have stable finances; and the problems with Italy and Greece were already taxing the patience of the centre country (Einaudi (2016).

Financial links were probably more important than trade. In the 19th century Paris was traditionally the main place to place large debt issues, linking in particular the Italian financial system to France (Ousset 1990). For France, the main reason was political. The Paris Convention showed France's strength and it provided a cover to preserve bimetallism in a world which was slowly tending towards a gold standard (Redish 1993).

The Paris Convention had just 15 paragraphs of which four were key:

1. Rules on uniform coinage
2. Treasuries of participating states would accept silver coins from other members at the official exchange rate.
3. Limitations on the amount of coins permitted with a view to prevent money 'printing' (6 French Francs per capita).
4. The obligation for all contracting parities to take back their own silver coins circulating in the rest of the Union and redeem them against gold at the official exchange rate.

⁴¹ Walter Bagehot, writing in the *Economist* in 1866 took a positive view towards the creation of a 'continental' currency, but considered bimetallism a major drawback. Bagehot Walter, *The Economist*, 1866. Flandreau. La convention monétaire de 1865 entre la France, la Belgique, l'Italie et la Suisse. In: *Politique étrangère*, n°3 - 1998 - 63^e année. pp. 659-666. www.persee.fr/doc/polit_0032-342x_1998_num_63_3_4787

The first two established a de facto a common currency since coins minted in Italy would be accepted throughout the Union (as long as the French Treasury accepted them). The last two provisions were meant to protect the stability of union and ensure that no members state could gain seigniorage at the expense of the other. But they were frequently not observed in particular by Italy, giving rise to constant tensions. One reason for this was that the Convention did not provide for any enforcement mechanism.

The LMU was in constant flux. Originally conceived by France to preserve bi-metalism, it converted de facto a gold standard as fluctuations in the relative price of silver to gold rendered maintenance of the official rate of exchange of 15.5 silver to 1 gold impossible. The continuing tensions occasioned by a combination of weak partners (especially Italy) and a fluctuating silver price led to frequent revisions of the original 1865 Paris agreement. Barbaroux 2022 lists more than a dozen of amending Conventions until 1908. Starting the late 1870s the internal divergences were aggravated by the continuing slide of the price of silver which meant that it was overvalued within the LMU, leading Dutch and German holders to offload their silver in Belgium (Officer (2022)).

The Banque de France plaid a central role in the LMU, acting de facto as the clearing house its partners. This central role can best be seen when the migration of Italian divisional (silver) coins to the other Union partners became a major problem. The Banque de France (BoF) agreed to collect the Italian coins circulating in Belgium, Switzerland and Greece, paying for them immediately in gold at the official exchange rate (Barbaroux 2022). It granted Italy a delay of two years to reimburse it for this expenditure. Without this action of 'converter' or lender of last resort, the LMU might have collapsed at that point. The central role of the BoF in the LMU was based on France having the largest economy (about as large as the others together), but also the political will in France to avoid devaluation and debasement, even after the disastrous defeat in 1870/1. France had a public debt ratio similar to that of Italy, but it paid lower interest rates because of this perception in financial markets that honouring its commitment was central to French politics.

The key weakness of the LMU was that it proved impossible to enforce the limits on divisionary coinage. In some case this was egregiously misused. For example, Political protection by France allowed the papal state to massively over-issue silver coins (as much as Belgium, which had a population 7-10 times larger). Greek silver coins were no longer accepted in the rest of the Union after that country also over-issued.

It is at first sight surprising that the LMU survived for half a century despite continuing tensions and problems. Yet the gains from its dissolution were not evident. The experience with the Italian coinage abroad, as well as other crisis, shows that even in the face of serious difficulties the weaker partners preferred to remain in the LMU because leaving would have forced them to face immediately the cost of their currency debasement. Continuing membership allowed them to defer this cost (Filocamo 2021). For France, the center country, the economic cost of supporting the Union seemed small, relative to the political cost of destroying a project which was widely perceived as a prestigious French construction and adding to France's political cloud as leader of the Latin block.

3.2. The creation and dissolution of monetary unions

High-level discussions of a break-up of the euro did take place during the Greek crisis. However, also here, the orchestrating of an exit remained highly sensitive for all parties concerned. Greece did not want to leave in the end despite the clear rejection in its 2015 referendum of the reforms imposed and the other eurozone countries feared, among others, that Grexit would trigger speculations against the weakest nations or banks. Bundesbank president Weber denied having participated in a break-up discussion (Expatia 2005⁴²) and it took in The Netherlands government until October 2022 to share with parliament – still behind closed doors – scenarios for the euro that apparently had existed from the early 2010s onwards.⁴³ It took several crises after 2008 before a sense of trust started to emerge that even Germany and The Netherlands would not actively push others to leave the euro. In the mean-time Greece has remained committed to the euro and right-wing parties in the EU, such as Marine Le Pen, have shifted away from pleading for a euro exit. These consecutive crises have clarified the resilience of the euro. This has allowed for a more open debate about the euro where governments can even admit having exit scenarios without creating havoc in the financial markets.

European monetary union figured on the agenda for a long time before it was finally created (Conclusions of the The Hague Summit 1969⁴⁴, Werner Report 1970). Its creation followed the success of Jacques Delors' internal market program ("1992") and the trust this had created in the European project as well as following the monetary disturbances between the end of the 1970s and early 1990s. The reasons for creating the EMU were largely political (Szász 2000, Wanningen 2019) as the reasons for monetary unions mostly are.

Yet, the narratives for the EMU were political as well as economic. One important economic push for setting up a common currency came from -- among others – the generally cautious central bankers (James 2012). Micro-economic advantages are lower transaction costs while macro-economic advantages include the elimination of currency risks and lower interest rates for weaker currencies. Exchange rates had been particularly volatile since the 1970s when Europe had to contend with oil crises, increasing unemployment, large budget deficits and competitive exchange rate adjustments. The downside of fixed exchange rates, however, is the inability to devalue so that monetary unions are best suited for optimal currency areas⁴⁵ consisting of comparable countries, which as Mundell argued, the eurozone with the 11 original founding members was not. The loss of monetary policy sovereignty is especially

⁴² <https://www.expatica.com/de/general/euro-collapse-report-absurd-bundesbank-chief-100795/>

⁴³ [Kamerbrief vertrouwelijk informeren over crisisscenario's euro | Kamerstuk | Rijksoverheid.nl](#)

⁴⁴ Communiqué of the meeting of Heads of State or Government of the Member States at The Hague (1 and 2 December 1969). [Final communiqué of the Hague Summit \(2 December 1969\) - CVCE Website](#)

⁴⁵ Mundell, R. (1961) "A Theory of Optimal Currency Areas", *American Economic Review* 51 (4): 657-665.

Krugman, P. (2012) *Revenge of the Optimum Currency Area*, NBER Macroeconomics Annual. <https://www.journals.uchicago.edu/toc/ma/current>

pressing for less advanced members of a currency union in case of an asymmetric macroeconomic shock.⁴⁶

Throughout economic history regions and countries have experimented with forms of monetary unions with a view to facilitate trade by keeping coordination costs low and to increase mutual trust. The economics of efficiency and the politics of strengthening trust relations go hand in hand. Monetary unions can range from fixed but adjustable exchange rates (e.g. the Bretton Woods system based on the dollar pegged to the price of gold) to irrevocably fixed exchange rates with common institutions for example in the form of a common currency and common rules for money creation (e.g. the euro zone).

A monetary union needs, first of all, a foundation. Particularly before the evolution of current paper money ('fiat money'), gold and/or silver defined the value of currencies. Secondly, a central bank was required to regulate the amount of money in the system, to ensure price stability and, hence, trust. A tendency to lose focus on price stability is one of the potential fallacies of central banks and it can lead to Central Banks even stimulating hyperinflation instead of stability (White 1999).⁴⁷ For the time being the hyperinflation scenario remains extremely unlikely as evidence from surveys and inflation swaps points to lower inflation in 2023 and beyond.⁴⁸

Fluctuations in trade flows, changes in the prices of gold and silver monetary, and governments not playing by the rules, have compounded monetary unions with fluctuations and instabilities. Nevertheless, markets have accepted these and have been able to deal with changes in price levels, and under and over valuations, by hedging risks (Bordo and Jonung 2000).

However, if economic and political turbulence turns into an exceptionally profound crisis, monetary unions can break up – but not so easily. The SMU and LMU started to break-up as a result of WW1 but it lasted until the 1920s before the break-up was final.

The coming and going of monetary unions is well documented and shows that their resilience depends on political will from the leading country and from the other participants, on the quality of national and federal institutions including the set-up of the central bank, on flexibilities in national policies adapting to change, and on supervision of governments respecting the rules (Sarvelos and Brehon 2011, Schout and Van Riel 2022). Most common currencies are created after regions have agreed to form a political unity (Aguiar et al. 2014).

⁴⁶ R.E. Baldwin, C. Wyplosz: The economics of European integration, 2nd ed., London 2006, McGraw-Hill Education.

⁴⁷ [Holland Gold: Wim Boonstra over contant geld, CBDC, noodplan euro en toekomst EU - Holland Gold in debat #5 on Apple Podcasts](#)

⁴⁸ The end 2022 survey of professional forecasters has inflation expectations for 2024 clustered 2.4 % with only a very small probability (less than 5%) of inflation remainin above 5 %.

Common problems in monetary unions include the monitoring of overspending of regional governments (see e.g. the autonomous regions in Belgium⁴⁹, Spain and provinces in China) that result from political constraints any democratic government faces. Similarly, if economic cycles do not converge, speculations from the financial markets can attack the weaker countries.

Searching, or having established, a political union, is the most important reason for a monetary union. A monetary union generally concerns countries with a common culture (Bordo and Jonung 2000). Also the break up of monetary union is often highly political and follows major disturbances such wars (e.g. collapse of the Austro-Hungarian empire after World War One) or the dissolution of countries (Soviet-Union, Yugoslavia, Czechoslovakia). Wars play an important factor in the creation of a monetary union (War of Independence and the Civil War in the US) as well as the dissolution (World War One: The Latin Monetary Union, the Scandinavian union, and the Austro-Hungarian union). Large countries usually are the anchor of a monetary union. The Bretton Woods system relied on the US dollar being pegged to the gold standard. The war in Vietnam played a part in the dissolution of the Bretton Woods system. After years of gradual erosion of the financial position of the US, it took until 1971 that the US could no longer sustain the value of the dollar. Yet, even then, the dollar remained the global currency reserve. As these examples show, the break-up of a monetary union takes considerable turbulence in view of the vested political and economic interests.

3.3. Who has most to gain from a break-up?

The discussion on a break-up of a monetary union raises questions about the process and the consequences of exit such as from the eurozone. The reasons for leaving a monetary union differ between strong and weak countries (Eichengreen 2008). A general reason for small or weak countries for being reluctant to defect is the political cost of being relegated to a second-tier status within Europe. Hence, countries will likely leave if there are others willing to exit too. One of the political advantages for the remainers is that decision-making can be easier and 'too little too late' or 'one-size-fits-none' are prevented.

If the core – Germany in case of the eurozone – leaves it would seriously harm the international credibility of the monetary union as well as probably the unifying forces in the EU as a whole. Yet strong member states generally have less incentives for leaving a monetary union. Also economic strong countries will have to depreciate relative to global actors after an exit and will imply importing inflation and interest rates will increase at least temporarily (Sarvelos and Brehon 2011). Moreover, the Netherlands and Germany have benefitted considerably from intra-eurozone trade and their related undervalued exchange rates. Finally, a surplus country leaving the eurozone will run the risk on the investments in the system of central banks and in the Target2 system.

However, if the 'voice' of smaller or poorer countries does not carry much weight in the Board of Governors of ECB or in other important European negotiation structures, exit might

⁴⁹ België's budgettaire situatie is 'duidelijk onhoudbaar', *De Standaard*, 23.1.23. [België's budgettaire situatie is 'duidelijk onhoudbaar' | De Standaard](#)

become an option (Eichengreen 2008). Similarly, strong member states may see the costs of eurozone membership increasing (see Hoogduin and Van Der Kwaak 2022 as discussed below). Criticasters in The Netherlands of ECB policy, of deeper integration or of new financial transfer funds or facilities have been making the point for many years that Dutch politicians lack ‘voice’ in the EU and can only “sign on the dotted line”.

Weaker countries have a greater incentive to exit. One mechanism at play is that competitive countries with a relatively high productivity growth will see the surplus on their balance of trade increase also due the absence of an appreciation of their exchange rate. Hence, less competitive countries find it increasingly difficult to compete within a monetary union. For example, Portugal had become 25% overvalued in 2006 – a depreciation that is hard to compensate at the same pace with wage reductions (Blanchard 2006). Saravelos and Brehon estimated in 2011 that France, located in between weak and strong countries, is probably the only country with an exchange rate within the eurozone that is more or less in balance. This creates heated debates over skewed competitive advantages, over the need for surplus countries to show solidarity and to increase public and private sector consumption, and over fiscal equilibration.

Other reasons for expecting less competitive countries to have more incentives to contemplate exit relates the immediate depreciation of the new currency and of the debts not held in foreign currencies, the loss of trust from the financial markets and the loss of the backing of the ECB. Financially, weak countries are left to their own devices.

The result are discussions about what kind of solidarity is demand from whom with Northern leaders demanding solidarity in terms of taking painful measures and political discourses pointing to the tendency of the eurozone drifting towards a transfer union (Wanningen 2019) versus leaders from the South presenting themselves as the true Europeans accepting the realities of a fiscal union (see the narratives of prime ministers Tsipras and Renzi during 2015 and 2016 discussed in Kassim and Schout 2023).

Yet, reasons for a break-up of the eurozone are also partly political, for example when there is a lack of mutual trust or when there is no political willingness to bail-out problem countries. Economic triggers to an exit can include a decision of the ECB to suspend – or even to open a discussion to suspend -- cross-border Target 2 payments. In that case, trade flows can no longer be financed and banks will run into trouble. Indebted countries will have to introduce capital controls – which de facto implies an immediate exit from the monetary union. The price however for capital controls will be high in terms of trade restrictions but also in terms of political resistance at home.

Economically, a weak country with a high debt can gain from exiting and the related devaluation on the condition that this is combined with strict fiscal consolidation⁵⁰ and a convincing reform of its institutions. The main advantages are a potential inflation of debt and a sharp reduction in real wages to boost exports and employment. However, import prices will increase, inflation will be imported and wages will be even further eroded. Apart

⁵⁰ Fiscal consolidation in the eurozone has fallen out of fashion even though countries that cut expenditures turned out to perform well in terms of growth and creation of employment (Schout and Van Riel 2022).

from the feasibility of such drastic measures, one may wonder why cutbacks and reforms should take place outside rather than inside the monetary union. If a country opts for drastic measures, it might as well remain member of the monetary union. Ireland and the Baltic countries have proven to be able to economize as well as reform within the eurozone and solidify trust of the financial markets. The economic history of for example Italy will not command the required trust outside the eurozone.

Finally, also outside the eurozone, to remain credible, countries will still be forced to remain within approximately a 15% band against the euro (Eichengreen 2008, Saravelos and Brehon 2011).

That exiting is not an attractive option for weaker or stronger states can also be seen in the US where no state exited. Also due to the experience with a limited number of States going bankrupt, States are well aware of the pressures from financial markets and of the increasing interest rates on debts so that the discussions on exiting from the dollar zone is not an issue (Frieden 2016⁵¹). As a result, excesses in terms of debts are tackled well before exit discussions become relevant.

These economic and political constraints for exiting explain why a split in a monetary union generally requires profound (geopolitical) turbulence. Moreover, many vested interests such as banks, industry and voters more generally, will fear the turbulence from an exit. This underlines that a monetary union is ultimately a political project depending on wide public support (as well as on fear falling outside).

Yet, whether some form of break-up will emerge will also depend on the behaviour of the central country, i.e. Germany. So far, Germany has made it clear that it will safeguard the integrity of the EU and the eurozone. Its commitment was underlined in June 2020 when it accepted the €800bn for the Recovery and Resilience Facility (RRF) and by its support for accommodating ECB policies. The RRF is intended to be a “one-off” and the ECB is official constrained by its primary task to ensure price stability. Nevertheless, reality may demand further support actions and economic and monetary policy will remain dependent on the political flexibility of Germany as “reluctant hegemon” (Miskimmon and Patterson 2023, Gros 2011).

3.4. Flexibility in the eurozone: The Matheo Solution (TMS)

Several options for (temporarily) break-up have been contemplated in the literature on the euro as well as in real-life politics.⁵² These include a temporary ‘euro holiday’ (a temporary exit), an exit from the euro but remaining within the EU’s internal market (which overlaps with the idea of a split between a Northern and a Southern eurozone), and the introduction of mini-BOTs⁵³ in 2019 (parallel currency such as suggested in Italian debates), and other ideas for different types of parallel currencies.

⁵¹ Frieden, J. (2016).

⁵² Gros, D., N. Thygesen (1993), *European Monetary Integration*, Addison-Wesley Longman Ltd. Dam, A. ten, *De Euro: sliken, stikken of Flexibiliseren*, [De euro: sliken, stikken of flexibiliseren? | Clingendael Spectator](#)

⁵³ [A Brief Explainer Of Mini-BOTs, Italy's Parallel Currency \(italicsmag.com\)](#)

One option for more flexibility is The Matheo Solution (TMS) in which the euro remains the only currency in use for payments (bank and cash) although every euro country will have its own national monetary unit of account (Dam 2017, Meyer et al. 2011, Wanningen 2019, Dam and Wanningen undated).⁵⁴ This situation would be the mirror picture of the situation that existed between 1999 and the introduction of the euro in the form of bank notes and coins in 2002. During this period transactions were made in the national currencies but the accounts were in euros (while bank statements and price tags in shops contained the amounts both in euro and national currency). The advantage claimed for TMS are that devaluations/revaluations are possible (managed within the ECB system) and can be tailored to the competitiveness of countries, and that countries can have interest rates tailored to their specific situations (no longer the 'one-size-fits-none').

The assumptions behind TMS are that the euro is no optimal currency area and that devaluations/revaluations are often needed. The TMS was conceived during the euro crisis, when Spain and Greece were indeed overvalued.

Chart 4.1 below shows the development of the real effective exchange rates of major euro area countries. It is apparent that there was a trend appreciation in most Southern euro area Member States. As argued above, this was due to the combination of a global credit boom and the capital outflows from Germany during its period as the 'sick man of Europe' in the aftermath of German unification.

Once the credit bubble burst, the Southern periphery went into a deep recession with high unemployment, which over time led to lower wages and thus an internal correction of the overvaluation. A reduction of public deficits after their peaks during the crisis further supported this process.

This experience shows that large depreciations are possible even within a monetary union. Economic theory suggests that a depreciation which is perceived to be permanent has a stronger impact on exports than one which results from exchange rate fluctuations which could easily be reversed and which would not address underlying causes. Figure 3.1 shows a sharp depreciation of the Italian lira in 1995, which was reversed in the space of less than two years. One would not expect potential exporters to invest in new capacity when they know that such a reversal is possible. By contrast, so-called 'internal devaluations' within EMU are much more sticky and can thus be expected to provide a stronger signal for exporting firms. Figure 3.1 shows the convergence of the four major eurozone currencies (Figure 3.1 also shows the somewhat belated convergence if two smaller countries -Greece and The Netherlands- are added).

One aspect of The Matheo Solution that it is difficult to understand, is the process by which the exchange rates of the national monetary units of account would be managed. If Italian savers expect that their bank accounts in the new Italian national monetary unit of account might be devalued relative to German (or Dutch) national monetary units of account, they

⁵⁴ Gros, D., N. Thygesen (1993), *European Monetary Integration*, Addison-Wesley Longman Ltd. Dam, A. ten (2017), *De Euro: slikken, stikken of Flexibiliseren*, [De euro: slikken, stikken of flexibiliseren? | Clingendael Spectator](#). See for a further presentation in English: [Solution to the Euro Crisis: About The Matheo Solution \(TMS\)](#)

might immediately transfer all their assets to the North. This means that major turmoil can be expected when financial markets expect (or merely suspect) a devaluation.

Figure 3.1 Real Effective Exchange Rates (1994-2021)

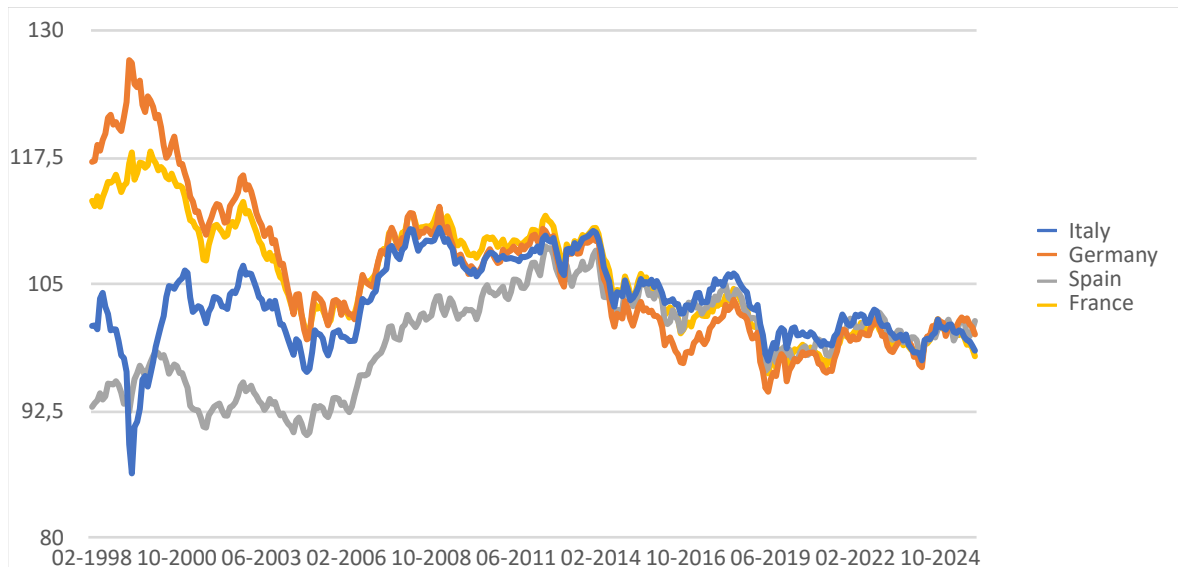
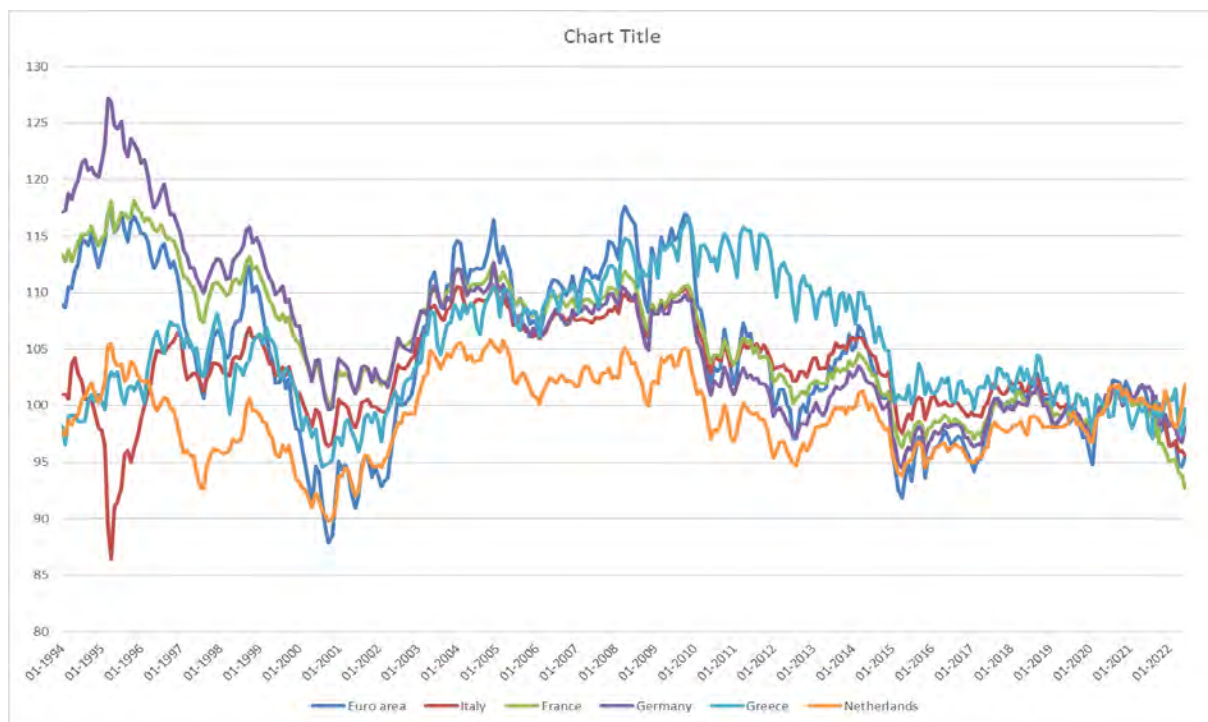


Figure 3.2



3.5. Euro Exits while remaining within the EU and a split in Neuro and Seuro

Stiglitz (2016) famously posited that exiting from the euro was easy and technically possible by means of a digital redenomination exercise. One option for exiting the eurozone is to remain inside the EU (Hoogduin 2022). It would offer a position such as currently Denmark, Sweden and Poland have in the EU while more or less closely following the ECB’s monetary policy. Given the likelihood that – smaller -- member states will not likely exit on their own,

this type of break-up resembles the much-discussed Neuro/Seuro option (Graafland 2012).⁵⁵ In case more countries exit, or if an exiting Northern country will regroup with for example Denmark and Sweden, they will have to contemplate whether they will form a true new monetary union including transfer of monetary sovereignty to a Neuro Central Bank or whether they will opt for more loosely coupled monetary cooperation while being anchored to the ECB.

In any case, finding new forms and balances cannot be done over night. Moreover, an exit from the EMU raises some legal issues as it is not foreseen in the Treaties. Hence, the proposal of Lex Hoogduin for a small, but symbolically important, change in the Treaties to at least signal or warning for highly indebted countries that exit is a possibility. Politically, however, if a country wants to exit, the legal constraints will be of minor relevance. It is unrealistic to assume that continued membership of the EU will be easy after exit from the euro. As also the UK learned the hard way, the atmosphere among the other countries in the EU will not be conducive to cooperation or to striking compromises. In fact, a break-up in the eurozone would put already strained relations in the EU under serious pressure. Any form of euro-exit will raise serious questions regarding the future direction of the EU. Hence Merkel's remark in 2010: "Scheitert der Euro, dann scheitert Europa".⁵⁶

Given these tensions between strong and weak countries, for the time being, voice over exit is the most likely scenario. Yet, the countries with high debts may have more powerful voices given the sometimes dangerous debt levels combined with turbulence in the EU's geopolitical environment due to economic cycles, wars, energy crisis and inflation pressures. Although exits are not to be expected without serious deterioration in geopolitical relations, the atmosphere in the eurozone may not become any easier if debt levels continue to increase.

3.6. Parallel currencies

The introduction of a parallel currency has sometimes been suggested as a half-way exit from the euro. However, this idea has never been implemented. Experience suggests that a parallel currency would be widely used only if it were clearly superior to the euro in terms of convenience or price stability. This is extremely unlikely to be the case in reality as the euro has been rather stable and it can be used conveniently in the existing payments systems. The main reason why a parallel currency was considered in Italy was fiscal. Some hoped that the government could issue very small denomination bonds (between 1 and 500 euro denominations), so called mini-BOT, which could then circulate among the wider public, strengthening demand (Papadia Roth 2019⁵⁷).

⁵⁵ "Lord Wolfson prize: How to escape the euro with the minimum of pain", *The Telegraph*, 4-04-2012. [Lord Wolfson prize: How to escape the euro with the minimum of pain \(telegraph.co.uk\)](http://www.telegraph.co.uk)

'Five ways the euro could break up', *BBC*, 4-04-2012. [Five ways the eurozone could break up - BBC News](http://www.bbc.com/news/economy-2012-04).

⁵⁶ https://www.bundestag.de/webarchiv/textarchiv/2010/29826227_kw20_de_stabilisierungsmechanismus-201760

⁵⁷ Papadia and Roth (2019).

The Italian project never got off the ground although it was contained in the official program of a government party. It would have encountered formidable legal obstacles as well as political and economic challenges. The legal obstacle is that the Treaty does not allow governments to declare anything else legal tender. Putting itself outside the Treaty would have meant that the country's banking system risked having to do without the role of the ECB as lender of last resort and to be excluded from Target 2.

As contracts will continue to be written in euros and only small transactions could be settled in the paper mini-BOT, it would be difficult to imagine this currency to take off. As a corollary, a parallel currency is hard to operate without further financial repression (capital controls and a forced exchange rate between the official euro and the parallel currency). Introducing a parallel currency means little else than an attempt to finance the home government with the printing press.

3.7. Temporary exit or euro holiday

A temporary exit was seriously discussed in relation to the Greek financial crisis between 2012-2015. German minister of finance, Schäuble, was one of the long-term proponents of a temporary exit and the outlines of a German plan leaked in 2015 after the Greek government had failed again to fulfil the conditions set by the Troika.⁵⁸ It is debatable whether a 'temporary' exit is different from an exit given that a re-entry would in any case demand a long-term preparation and adherence to the entry criteria.

There were serious steps being taken to prepare a (temporary) exit at the time the German plan was leaked. Allegedly, ECB officials were already in Athens to seize printing plates for the Greek euros (Dendrinou and Eleni Varvitsioti, 2019⁵⁹). Legal issues aside, a euro holiday to devalue, to get its house in order, and to cool down politically given the strategies of Tsipras and Varoufakis, could maybe have been a possibility in the case of Greece as small eurozone country. Yet, it would have been more difficult to manage in the case of large eurozone country for the political and economic reasons discussed above. Even the Greek government however itself decided to stay inside the eurozone although it was moving exceptionally close towards the edge of eurozone membership with a referendum on not to adhere to the reform program. With exit politically excluded, all parties returned to voice. A compromise was found combining debt relief adherence to the necessary reform conditions. Whether it was wise for Greece to stay inside the eurozone remains to be seen with 92% of the Greek population judging the economic situation as "bad", Nevertheless, 77% support membership of the monetary union (EBN Summer 2022⁶⁰).

⁵⁸ [GRC-10.7.2015-en \(2\) \(2\) \(2\) \(sven-giegold.de\)](#)

The Guardian "Wolfgang Schäuble: Greece could get more help, but debt haircut talk must end - eurozone crisis as it happened", 18-07-2013. [Wolfgang Schäuble: Greece could get more help, but debt haircut talk must end - eurozone crisis as it happened | Business | The Guardian](#)

BBC, "Wolfgang Schaeuble: Germany's man with a Grexit plan", 14-07-2015. [Wolfgang Schaeuble: Germany's man with a Grexit plan - BBC News](#).

⁵⁹ Dendrinou, V., E. Varvitsioti, (2019).

⁶⁰ [Standard Eurobarometer 97 - Summer 2022 - September 2022 - - Eurobarometer survey \(europa.eu\)](#)

It is also not clear what the effect of a more or less permanent Greek euro holiday would have had on other highly indebted countries. On the one hand, a temporary Greek exit could have imposed US-style discipline on countries with loose fiscal policies. Hence, it might have had a long-term effect by adhering to the no-bail out clause and constraining moral hazard. On the other hand, it might have implied increased insecurities on the stability of the eurozone. The short-term consequences at least were beyond what European politicians were willing to accept. The Greek crisis at least proved the thus far strong political commitment to keeping the eurozone together.

To conclude, we see little serious developments towards forms of a euro-exit.

4. ECONOMIC GOVERNANCE AND SUBSIDIARITY

4.1. Why some EU policies succeed while others continue to struggle

To compare scenarios, we need to define a number of operating mechanisms that together make up what we mean by 'governance'. The EMU debate focuses on economic governance tools. This is not enough. Given the fact that the EU is a multilevel system, it is unavoidable that we focus on roles of the national and EU levels, on the interplay between the two levels (the multilevel networks), and on the capacities requirements these European impose on national and EU institutions. To understand the effectiveness of the economic governance, we need a multidisciplinary perspective that combines the legal basis, the economics and the multilevel organisation. Here we focus on the latter.

Why do some EU policy areas succeed whereas other remain problematic for decades? One of the reasons why some policy ambitions and tools (such as the SGP) continue to struggle is that policy makers are interested in formulating policy but much less in designing policy systems (Wildavsky 1978). Moreover, research shows that officials involved in EU policies thought it was very "complex" to think through how to move from EU policy objectives towards effective administrative systems in which each level knows its roles so that the system functions as intended (Jordan and Schout 2006, Schout and Blankesteyn 2020, Schout 2021).

'Governance' is a well-used term in EU policy debates although with often little specification of types of governance tools, which combination of tools will create an effective system, and whether administrative tools or actions transmit or reduce economic signals (Schout 2011). In addition, there is usually only scant attention for how governance tools are designed even though in the EU's multilevel governance system EU institutions and national bodies have to cooperate.

In the private sector, organisations pay careful attention to the match between strategies and the design of the required structures (structure follows strategy). In the practice of EU policy negotiations, political compromises are often followed-up by incremental changes in existing multilevel systems (in essence: new wine in old bottles). The instrumentation of the SGP is an example of such tinkering with governance without arriving at a well-designed multilevel system. As discussed above, also the current Commission are little more than incremental adjustments without thinking outside the existing - struggling - paradigm.

The SGP, it has centered around top-down rules with little attention for what this would require from the member states in terms of roles and administrative requirements and from the Commission as manager of the member states as network. In the private sector this way of strategy formulation would be seen as mismanagement. Some attention for national administrative capacities in economic governance started to emerge when general - not

specific - requirements were imposed such the obligation of member states to create of independent fiscal monitoring bodies (IFIs)⁶¹ and the linking of ESM support to conditionality.

Yet, the role of IFIs has so far been limited and their size and quality differ widely between member states (Schout and Schwieter 2018). Moreover, everyday reality as regards the enforcement of economic rules has been a rather politicised process (Mérand 2021). In fact, a centralisation tendency can be identified in the consecutive reforms plans for the SGP in which the European Commission aspires a centralizing role by proposing among others a fiscal union and reserving the monitoring national plans and the dialogues with the member states for itself. Even though in recent years frequent references are made to IFIs, we see little of a systematic effort to design a multilevel economic governance system and to include in the mutual supervision or the writing of EFB reports.

4.2. Strengthening of political and market signals and of values

That does not mean that there have been no major changes in economic governance. Governance debate have mainly concerned instruments and a range of steps have been taken to manage or strengthen political signals between member states (peer pressure). Financial markets are not the only parties that provide signals. Even if economic market signals have to be kept in check during crises (among others due to the 'Whatever it takes' of Draghi), political forces gained in strengths (some of the traditional diplomatic kindnesses are clearly gone). The result is a mixture of market and political signals. Moreover, the 3% is now a broadly accepted limit on budget deficits (the 60% state debt much less not has a sound system of budget targeting been accepted). In terms of sharpened political pressures, German Finance minister Schäuble openly suggested to maneuver Greece - temporarily - outside the euro. In the case of Italy, Berlusconi was more or less ousted by the other member states and heavily - and openly - criticized in the European Council.⁶² The reluctance to criticize each other has been replaced by permanent visible and less visible criticism in the various Council fora and preparatory bodies such as the EFC (Bokhorst 2021).

The appropriate combination of market and political signals needs constant reflection. Room for sharpening the roles of market discipline has been summarized in the Dutch report *Consistent paths towards a stable and resilient European economy* in which suggestions have been discussed such as reinstitutionalization of the no-bail clause, strengthening the capital markets union, increase private risk-sharing in the banking union to prevent negative spill-overs to other countries, prudent treatment of government debt, and avoiding problematic public debt (Beetsma et al 2021). Yet, it will also be up to the politicians in the Council to ensure that political signals come across. In this respect, one ultimate step is to opt out when measures are adopted that may cushion necessary reforms or when they are not directly related to stabilizing the euro - an option increasingly recognized (WRR 2017, Schout 2020).

Moreover, more effort needs to be put into arriving at shared values (rules of appropriateness). Firstly, 'austerity' acquired a negative reputation even though the

⁶¹ 'Two- Pack' Regulation 473/2013

⁶² [EU leaders tell Italy: stop the rot and get your house in order | Eurozone crisis | The Guardian](#)

countries that have practices fiscal discipline have performed better in terms of debt reduction and growth (Schout and Van Riel 2022). Hence, the value of fiscal discipline needs to be reassessed. Secondly, especially now that the 60% rule is under discussion, it would be useful to arrive at a shared understanding of an upper limit where public debts become a liability as regards the stability of the eurozone and where countries no longer have sufficient buffers in cases of setbacks themselves so that they risks increase of having to demand solidarity from others.

4.3. From instruments to the design of instruments: Subsidiarity

On the whole, the toolbox of economic governance has been elaborated both in terms of tools and of political and market signals. Less attention has been devoted to how the instruments have been *designed* in the EU's *multilevel* system.

Tinkering with instruments, incremental changes, proposing new instruments, etc. will be of little use if there is no analysis of why instruments have not delivered. The corner stone of economic governance has been the legal SGP from the beginning. In addition, attempts at mutual learning were included particularly through the - by now abandoned - Lisbon Process. More recently, Independent Fiscal Institutions (IFIs) were added. Despite all the tinkering with economic governance, debts have gone up (although currently going down, among other due to inflation) and major structural weaknesses have remained a reality in some member states.

Why has the SGP struggled to live up to its expectations and been subject to continuous reforms in search of an effective model? Part of the explanation lies in political mismanagement and in the inadequacy of national institutions. In addition, part of the answer relates to insufficient attention for the design of multilevel European instruments. This can be best be illustrated by comparing economic governance to some areas in the EU where policies did manage to deliver reforms.

The success stories where member states built the required institutions and cooperative arrangements, include among others the liberalisation of European air traffic ('open skies'), the authorization of medicines on the internal market, the effective network-based competition policy, the creation of an independent system for monitoring the state of the environment, and the facilitation of the global competitiveness of the entire food chain in the EU.

These successes have involved major painful reforms at EU and national levels. These included the liberalisation of market access, professional risk management, transparency of decision-making, the setting up network-based independent monitoring and enforcement systems and the effective use if legal sticks if agreements were not respected. As a result, some of the EU's problematic and lagging sectors turned into world leaders and the evolved in setter of international standards in these areas (Egeberg and Trondal 2017, Chatzopoulou 2019). The EU has overcome the BSE crisis, opened protected markets for medicines, and overcome obstacles to open skies by breaking the protection of public owned national airlines. These areas where characterised by major national economic interests, heavy national protection, and profound cultural differences between member states. They have

also required world-class independent and transparent monitoring and control systems so that weaknesses are spotted, changes implemented, and trust is built.

Hence, sensitive, complex and dynamic sectors in the EU with major national interests attached can be reformed profoundly.

4.4. Subsidiarity-based governance

One explanation for the differences in success between economic sectors relates to the way in which the principle of subsidiarity is respected. Subsidiarity is a founding principle in the Treaty and politicians are keen to refer to subsidiarity. However, how to apply subsidiarity has remained somewhat of a mystery in EU policy processes. The basis of any federal model is the specification of the (subsidiarity-based) relationship between the member states and the European institutions.

Subsidiarity is the equivalent of decentralization as organizing principle in the private sector. Economic policies in the eurozone are unavoidably decentralised as member states have their own economic welfare functions and hence have different preferences regarding social systems, health care, etc. It is at the national levels that organisations learn, have the best feel for what citizens want, respond to shifts in preferences, and political decisions are made and communicated. The question of how to integrate decentralised responsibilities into effective systems is a well-known challenge in private sector management. Decentralisation offers a practical perspective on the application of subsidiarity and allows to draw private sector lessons on decentralisation and cooperation (Lawrence and Lorsch 1968, Mintzberg 1979).

Whereas in the private sector decentralisation is about *managing interdependence*, in the EU decentralisation is approached as a legal interpretation of subsidiarity and is about *separating* tasks. Article 5.3 of the Treaty of the EU presents subsidiarity as the efficient distribution of tasks between separate layers of governance “*either at central level or at regional and local level*” with a view to scale effects (emphasis added). Subsidiarity as discussed in the EU generally relates to the vertical division of competences between levels of governance (*legal subsidiarity*).

To understand successes and failures in governance we need to shift our attention away from legal integration of moving tasks upwards, towards subsidiarity as managing horizontal cooperation. In organizational terms, *administrative subsidiarity* starts from the assumption that the integrity of tasks of member states is maintained. This shifts the focus towards the design of multilayered coordination systems.

Based on the experience in other areas we identify the following elements for managing interdependence between national and European authorities (Everson et al. 1999, Schout 2020, 2021a+b):

- To ensure ownership, profound knowledge of national situations and frictions, and national visibility, it is important that the integrity of national administrative systems is warranted. In terms of monitoring of economic performance and public debts, member states require well equipped national Independent Fiscal Institutions (IFIs). Moreover, the quality and credibility of national institutions dependent on their

independence, resources, abilities to produce their own assessment models and a leadership that is highly regarded and visible (Schout and Schwieter 2018).

Despite rather lengthy discussions on IFIs, their quality and use has so far remained sketchy.

- Networked-based cooperation. To ensure ownership at the national level, legislation has to be elaborated in the networks of national and European agencies in terms of rules of procedures, setting goals and intermediate goals, manuals, and supervision structures ('integrative bargaining', Metcalfe 1992).

The network of IFIs that exists now is a 'light' network (a soft form of exchanging information and discussing themes of common interests).⁶³

- Independence. Information gathering and monitoring tasks demand independent national and European authorities. To ensure the emergence of a common culture of independence, it is important that the network defines the appropriate collective ways of working. It will be difficult to expect national independent authorities to work with a politicised European Commission given the conflicting values (expert value of independence and civil service culture influenced by everyday political realities). Hence, the distance from political decision making will also affect the design of the EU Commission.

Currently, the national IFIs are too dissimilar, and many are too small to operate independently with an own staff, data and assessment frameworks.

- Monitoring implementation is primarily a responsibility for member states (*first-order* or direct supervision, Scholten and Luchtman 2017) and countries also inspect each other's policy systems (*second-level* team-based supervision of the supervisors). The second-order supervision of the member states can best be carried out in teams of varying composition as happens in for example the Schengen Evaluation System (Schout and Blankesteyn 2020).

It is unlikely that any time soon, the EU Commission will share monitoring the quality of national institutions and ways of working in a network. Moreover, member states themselves rather deal with a political Commission with which compromises can be struck than with transparent and independent authorities.

4.5. Subsidiarity and the roles of the EU institutions

The subsidiarity-based way of working also has major consequences for the EU institutions: Rather than a legal role, the importance of the Commission lies in its role as network manager: identifying bottlenecks in cooperation, supporting mutual and transparent inspections, and supervising the effectiveness of the system. The information and analysis have to come primarily from independent national authorities.

Moreover, it is important to realize that tasks carried out at EU level should as a rule not diminish the roles and involvement of national authorities. The integrity member states has to be safeguarded (i.e. respecting the principle of *administrative subsidiarity*).

⁶³ [EUIFIs - European Independent Fiscal Institutions](#)

Administrative subsidiarity is not the same as intergovernmentalism. The EU commission remains responsible for proposing corrective and disciplining measures to the Council and, eventually, for taking countries to court if weaknesses are not addressed and corrections not implemented.

Similarly, the independence of the subsidiarity-based governance mechanisms should not be equated with depoliticisation. Information gathering and analysis are put at arms lengths, reports are transparent, yet the decisions on follow-up measures remain in the hands of the EU Commission, the Council and with obligations to inform the European Parliament. If the Commission does not follow the gist of the publicly available reports from the network of independent agencies, the Commission has to *comply or explain*. The Commission keeps its own political responsibility but needs to argue its decision. One could even go one step further and give the Commissioner for economic affairs and the euro a separate, independent status outside, but responsible to, the Commission. Since politics counts in the end, the Commission President should be able to overrule the decision. This will then, as it should, trigger heated debates.

The role of the European Parliament is to not only monitor the formulation of policies but to also ensure that policies are directly linked to the effective design of the required multilevel administrative systems and networks. In the past, the European Parliament was closely involved in defining and supervising the creation of governance systems in, for example, environment policy, aviation safety, quality control in the food sectors, etc. (e.g. Everson et al. 1999). The question needs to be addressed whether in its current composition the European Parliament – and the European Commission – still has the governance expertise in-house to ensure that policy ambitions are matched to multilevel administrative systems. It may well be that politicisation ambitions have replaced the earlier focus on good governance and better regulation (European Commission 2001 Governance White Paper).

These basic principles of respecting the integrity of national tasks and cooperating in networks help to explain why mutual learning and the establishment of shared professional values have worked in some areas but less in economic governance (Vantaggiato 2019, Martinsen et al. 2020, Schout 2022).

A subsidiarity-based way of working is still quite removed from the current design of economic governance in the eurozone. As regards economic governance, DG ECFIN and the EFB will have to be disconnected from the Commission and redesigned to make maximum use of national capacities also with a view to ensuring the building up of national institutions. A change process could start in the EP but for this it would need to have expertise to control that policies are not only defined in terms of ambitions but are also complemented with workable multilevel administrative structures.

5. SCENARIOS FOR THE EUROZONE

5.1. Introduction

A scenario is a construction of possible outcomes. It presents plausible and more or less likely dynamics based on specified factors and circumstances with a view to identifying possible outcomes. Below we discuss four scenarios: Business As Usual (BAU), Deeper Integration or Fiscal Union scenario, (fiscal) Divergence (including Break-up), and the Minimum Model. We do not include a specific convergence scenario because continuous fluctuations between countries converging and diverging is the *modus vivendi* in a monetary union. Rather than assuming convergence, the fourth model - the Minimum Model - is about the essential requirements acknowledging that some divergence is normal within monetary unions.

BAU and Divergence are scenarios driven by regular - but in nature different - crises. In BAU the forces are more or less in equilibrium without consensus over a specific model emerging. Divergence deals with existential crisis situations with European leaders walking along the edge of the cliff.

The Deeper Integration and Minimum model are rational constructions. The Deeper Integration model concerns a rather centralized federal union with a European minister of finance overseeing a substantial Union budget to delivery of what is often understood to be European public goods⁶⁴ such as European defense, European climate change investments, or social stability. In terms of political support, the Deeper Integration model is preferred in Southern European countries and in the EU institutions while the Minimum Model is supported in the North (Schout 2021, Schout and Kassim 2023). BAU and break-up scenarios resulting from political pulling and hauling.

We will first present the characteristics of each scenario along the lines presented below and subsequently discuss the models along the steps summarized in Table 5.1 and confront them with an increase in economic turbulences.⁶⁵ Table 5.2 offers an assessment of consequences and likelihood of the scenarios.

⁶⁴ On the question whether 'European public goods' can be rationally identified or whether they are a political construction see Fuest and Pisani-Ferry (2019).

⁶⁵ The effects of different forms of shifts - such as a crisis, an increase in interest rates or strongly increasing inflation rates - would require further study. We can only address some of these dynamics in the scenarios.

Table 5.1 Assessment frame of the four plausible scenarios

<ul style="list-style-type: none"> - Description: Essential characteristics of the scenario. This includes a specification of trends and the drives, and a discussion of the instrumentalization (governance framework, rules, supervision, role of market mechanisms, networks). - Conditions: Specifications of conditions when a scenario will be relevant. For example, continuous power struggles may result in the Business As Usual (BAU) scenario with decisions being taken too little too late. Alternatively, EU governance may find ways, e.g. in response to crises situations, to manage reforms, or EU leaders might finally agree on a specific governance model. - Extend to which subsidiarity principles can be identified in the multilevel cooperation system. The models specify the national and EU capacity requirement, and the design of the related European networks. The minimum model is most developed as multilevel – subsidiarity-based – system whereas the Deeper integration is the most centralized of the four scenarios. - Assessment of Resilience. The characteristics presented above offer insight into the resilience of the scenario. Resilience is ultimately defined as the extent to which debts are sustainable and is linked to the quality of market mechanisms, reliance on subsidiarity, and quality of the EU’s multilevel system. The latter is closely related to the quality of national institutions that collectively define the long-term competitiveness of a country. - Consequences/risks: The scenarios will trigger economic, political and institutional dynamics which will be discussed in general terms. Drawing on the history of the 30 years since the Maastricht Treaty, also the risks of the scenarios will be specified. - Likelihood. The likelihood of scenarios will be assessed based on long-term trend analyses and expert assessments. Scenarios in themselves do not offer a weighing in terms of feasibility and likelihood. To ensure a well-informed assessment the scenarios, we will organize, both in relation to the quality and the visibility of the report, a workshop with prominent experts on the resilience, feasibility and likelihood of the scenarios.

Table 5.2 Consequences and likelihood of the scenarios

	BAU	D e e p e r i n t e g r a t i o n / F i s c a l U n i o n	D i v e r g e n c e / B r e a k - u p	M i n i m u m M o d e l
Conditions	Power balance preventing the emergence of a specific governance model	Agreement to move important socio-economic tasks to the European level and to shift part of national taxation to the EU level	High debts combined with an exceptional crisis (e.g. a war on the European continent or drastic changes in the g e o p o l i t i c a l environment)	Agreement of the basis principles of e c o n o m i c g o v e r n m e n t s (mainly: respect for the 60% rule) Member states with strong national institutions
Subsidiarity-based	Incomplete set-up of any specific model in particular M u l t i l e v e l management deficit	No System operates on the basis of centralization of tasks	No. Break-down of the multilevel system	Yes
Resilience	Yes	Depends on the design of the incentives for member states. For example, will they be able to go bankrupt? If not, countries may have incentives to interpreted fiscal rules	No	Most resilient scenario
Risks	Legitimacy at risk due to continuous inward-looking negotiations without e f f e c t i v e l y addressing problems	The centralized model may not quite fit current practices in economic governance Fights over national debt levels and use of EU funds may result in too-little-too-late actions in the foreseeable years	Countries breaking-away will lose access to financial markets Major disagreements over the distribution of mutual assets and debts Lose-lose	T e n d e n c e t o centralize tasks
LIKELIHOOD	MOST LIKELY	UNLIKELY FOR THE TIME BEING	UNLIKELY	LIKELY

5.2. BAU (Business as Usual)

Description: The first scenario assumes a continuation of past trends with unequal convergence, different growth levels, a tendency towards increasing debt levels and occasional crises. A key issue in defining ‘business as usual’ is that the last years have been characterised by a succession of ‘one in a generation’ shocks. It would not be appropriate to assume that the next decade will be just a continuation of 2020-2022. There were periods of satisfactory growth and some consolidation of public finance both before and after the financial crisis. But it would also not be appropriate to assume that there will be no shocks or no economic downturns.

The starting point is that some member states remain particularly vulnerable to shocks given their lack of fiscal buffers so that, in case of another shock, emergency support might be required. As a result, BAU is about continuation of pressures on public finances in some countries (partly the same and partly different countries), and recurring political tensions in and between member states. Indebted countries tend to complain about high interest rates and that 'Europe' stands for forcing reforms and austerity on them, while others point to the success of their own efforts as an example of how to take painful measures early on to build up fiscal buffers. Similar tensions and recriminations can arise as a result of sharing the financial consequences from major European ambitions such as building up (national) defence capacities or investments in energy transition.

This contentious process is not new. Any new major crisis tends to lead to calls for new instruments. Yet, for political and practical reasons, member states often fail to agree on decisive measures and when new instruments are created their effectiveness is limited because they have to be incorporated in existing national and European structures ('failing forward', Jones et al. 2016). Due to lack of effectiveness, instruments will continue to be added, changed, shelved and withdrawn, and implementation and supervision will remain problematic. Hence, the eurozone remains basically as it is in terms of governance and tensions between the member states: incrementalism without much direction.

BAU can be regarded as 'normal' politics (Schout and Kassim 2023). Politics is about clashes and compromises. European politicians clash over objectives and over support measures all the time, but none of the actors breaks away. 'Normal' politics differs from 'existential' politics which concerns an exit. Media often regard EU politics as existential as is clear from the many discussions around European Council meetings when journalists have asked 'Will the euro fall?' or 'Will they be able to find a compromise?' The profound clashes over reforms and solidarity belong to normal politics in which clashes lead to compromises without existential exit options gaining much traction. BAU may seem an unstable scenario but in fact it is remarkably stable. Parties clash but the existing balance is maintained: no one is in control, yet the system is controlled (compare Moe, 1987).

The balance in the BAU scenario goes back to the negotiations over the Maastricht Treaty where the Northern countries first wanted convergence and the Southern countries wanted to start with the introduction of the euro assuming that economies as well as the institutions of the eurozone would adapt overtime among other under the influence of the market forces (Marsh 2011). That this political compromise turned out to be more permanent than hoped at the start can be explained by the 'stickiness' or path dependence of national institutions. National institutions have long histories and deep roots in societies (North 1990, Pierson 2000). Given that national institutions, cultures, and traditions are hard to change, Business As Usual is the most likely scenario.

Examples of stickiness in EU governance include the (limited) progress that has been made in the banking union, the problematic supervision of the SGP, the uneasy position of the ESM due to differences over conditionality and over independent supervisory bodies, the fate of the Lisbon Process (Jordan and Schout 2010), the limited effectiveness of the EU Semester, and the weak network of Independent Fiscal Institutions (Schout 2020). Similarly, the RRF

was heralded by some as Europe's Hamiltonian moment on the way towards a fiscal capacity whereas it was clearly defined as a one-off. The many attempts at governance reforms contributed in the end little to the often-expected deepening of integration. But even if half-baked or imperfect if taken one by one, the mechanisms and institutions created after the financial crisis have made EMU more robust, at least with respect to financial shocks. By the same token, some political forces in some countries toiled with exiting the euro but no country left.

The role of the ECB will often be central in the BAU scenario, especially in times of renewed crisis. Yet, the conflicting demands on the ECB and the legal tensions will contribute to a rather stable pattern of moderation that – evidently – will be criticized by hawks and doves alike.

On many occasions, discussions emerged over the role of the Commission as independent supervisor but also here little progress has been made. Commissioner Olli Rehn became the budget tsar with a wide-ranging autonomy within the EU Commission comparable to the depoliticised competition authority.⁶⁶ Yet his successor, Pierre Moscovici, favoured a political approach and economic governance did not acquire an independent position within the Commission (Merand 2021).

A range of proposals emerged regarding a new political culture in which data gathering and enforcement of rules would be separated from the political Commission. Yet, member states and the EU Commission have preferred less transparent politicised ways of working. For member states this situation offers the possibility to strike compromises and to delay measures that are politically unwelcome while the Commission offers for continuous dialogue and pressure without breaking the leash (Schout 2021).

To move beyond the status quo would require the development of a shared long-term perspectives to help broadening the mindsets of contending actors (March and Simon 1958). Despite institutional stickiness, organisations can change, and new ways of working can help to arrive at new cultures. An alternative way to break out of failing-forward would emerge if the power politics change, for example, if one party refuses to incrementally accommodate crisis measures (e.g. by opting out), if debts of one country threaten the survival of the system, or if a major shock (such as a war situation or climate change) demands steps towards deeper integration (as happened in the US).

Conditions: National institutions are slow to adapt to new situations and the inherent stickiness of institutions⁶⁷ has been clearly visible since the Maastricht Treaty. Convergence (in debt ratios) remains problematic due to weak national institutions particularly in one or more countries that are sufficiently in size to be politically influential, and due to the continuation of the differences in views on economic governance. The complexity of economic trends and variables enables member states to respect the letter but not the spirit of the fiscal rules (Tesche 2022). Both the Commission and the member states find it easier

⁶⁶ [Europe close to creating 'budget tsar' | Financial Times \(ft.com\)](#)

⁶⁷ Compare North, D.C. (1990).

to avoid questions about allocating effective enforcement while favouring informal interactions.

Subsidiarity: Not well developed in terms of national and European tasks. Member states remain unwilling to discuss the quality of each other's administrative systems. Moreover, EU monitoring and enforcement is not understood as a system of first (national) and second (EU) order control. If there is a vision on the EU, it is centralistic and related to the EU Commission as fiscal authority and centralised supervisor combined with little notion of how to set-up and operate a European network. BAU is mostly about the EU; less about the operations of the member states other than in general terms.

Even though member states created the obligatory independent IFIs, it will be hard to create a European, multilevel, system of independent fiscal bodies deeply involved in mutual enforcement and transparent reporting on flaws in the system. Firstly, not all member state will invest to the same extent in IFIs so that size, quality and actual independence of IFIs will remain highly divers. Secondly, the EU Commission will be hard pressed to agree to leave fiscal control in the hands of a network of independent authorities. Thirdly, politicians, civil servants and – in the case of economic governance – economists and lawyers have little affinity with designing organisational structures. In other words, economic governance is trapped in a management deficit.

BAU assumes maintaining existing institutions and not really creating new ones.

Role of the market and political forces: The importance of market forces and signals depends on a combination of the general state of financial markets (i.e. the degree of risk aversion) and the (often delayed) compromises reached between member states and the EU institutions. The more gradual financial markets react to fiscal developments, the more they are likely to be accepted as giving important signals about sustainability. However, financial markets are subject to sudden crises. Sudden spikes in risk premia are likely to be taken as a call for action and for creating, after considerable negotiations, new institutions. The ESM is a case in point. The ESM was placed in under the finance ministers outside the EU Commission and it took a while to be created. Hence, BAU is likely to be punctuated by periods of crises that are only after a while being dealt with (there is no pre-existing crisis-buffering capacity because each crisis will demand its own painful negotiations) when political compromises are found. The economic and political processes take considerable time and can result in initial amplification of market forces while at a later stage in the process market signals are muted by EU funds and politicised political supervision of reforms. Nevertheless, markets seem to have developed more trust in the eurozone and its willingness to stick together. This makes it possible for BAU to struggle on without falling over.

Administrative development/Institutional capacities: The eurozone will continue to suffer in this scenario from a multilevel management deficit.

Independence is not guaranteed in the institutions at national and at EU level. It is unlikely that the Commission will transform its economic governance bodies (DG ECFIN and the EFB now integrated in the Secretariat-General of the Commission) into independent bodies. Moreover, the Commission will not act as network manager and rather keep the network of

national authorities at bay (just as national authorities will be happy to keep the Commission - the authority that can initiate infringement procedures - at a distance). The organisational set-up will remain business as usual. The administrative system relies on informal relations.

Resilience: Economic governance has been flexible as a willow in the wind – not like an oak that might have been uprooted in a crisis (Brunnermeier 2022). BAU is resilient due to the flexibility in allowing the uneven accumulation of debts between the member states, the search for temporary funds, moderated market signals, and the almost permanent fights over reforms and conditionality. Moreover, the ECB system plays a role in absorbing national debts and balance of trade deficits (Target2) but also manages – albeit with some delays -- to focus on price stability as main objective. A political force of major importance is the France-German axis – characterised by inevitable quarrels -- as motor of political compromises.

Likelihood: Looking at the past performance of the eurozone and the lack of direction in institutional and economic governance reforms, BAU is the most likely scenario.

Consequences, risks or drivers of change: BAU implies that over time, deficiencies in member states are insufficiently addressed. Other large and diversified economic competitors (such as the US) are not necessarily in a better position given the stickiness in their own institutions and the own conflicting interests that have to be managed (see the evidence of the lack of convergence within the US).

Yet, the debts of particularly Greece and Italy may be problematic in case interest rates rise more than expected. Moreover, a continuation of debt financing in France and Belgium may affect the resilience of the eurozone. A lot will depend on the political coherence within the member states to address debts and obstacles to necessary reforms. In any case, the continuation of debt accumulation and politicised enforcement of the SGP, risks to become problematic combination and the current situation does not create a welcome starting point in case new set-backs occur. Also an increase in inflation – home-grown or imported – could create economic and political turbulence due to rising interest rates and an increase in the spreads. Yet, recurring crisis are part of BAU.

The demand for transfers between member states is likely to remain on the part of the lagging Member States. But their willingness to implement reforms may test the extent to which member states will continue to show solidarity. Safe assets will be demanded given financial difficulties in some countries, but safe assets will remain highly sensitive. The current investment plans of the EU and of the individual countries related to greening and energy transition will put addition pressure on the financial sustainability of BAU.

One key stabilising factor under BAU is that the key country with a combination of low growth and high public debt does not have a problem with external financing. Italy has run a current account surplus for a decade and has achieved a positive net foreign asset position. This means that the country does not need external financing. Italian financial institutions are likely to direct a large part of the excess savings of Italian households (which have created the current account surplus) towards Italian public debt should risk premia increase. This differentiates the situation of Italy from that of the countries which had to ask for ESM

support because they had large external financing needs. Italy is thus unlikely to require an ESM program, which would anyway be politically extremely contentious.

5.3. Deeper Integration - fiscal union

Description: A form of fiscal union was already on the agenda during the Maastricht negotiations but these resulted in the more rule-based basis for the EMU. Those who think the monetary union demands a fiscal union were disappointed and therefore refer to the 'design flaws' in the Maastricht Treaty (Ji and De Grauwe 2015, for a critical assessment on 'design flaws' see Schout 2018).

There is a difference between a fiscal union for the EU and a fiscal capacity for stabilizing the monetary union. The fiscal union for the EU generally concerns also the financing of EU-wide political ambitions. The fiscal union - even though often discussed under the banner of 'EMU' or 'genuine EMU' (Barroso 2012, Four Presidents Report 2012) - is about EU's ambitions. Investment projects in alleged public or club goods relate to political ambitions and have to be seen in isolation from what is needed for the resilience of the eurozone. Moreover, the discussions have to take into account that EU member states generally have already well-developed national budgets to deal with social-economic tasks including for buffering the effects of economic downswings.

For the eurozone, the fiscal union is only about economic stabilization and the distribution of costs and benefits of stabilization. However, what the minimum requirements are will be presented in the fourth scenario below. Here we will review what is generally associated with a fiscal capacity for the eurozone. One of the alleged needs for the fiscal capacity includes the fact that any country can run into economic troubles due to external shocks bigger than individual members can bear, due to delayed reforms and lack of flexibilities or buffers in a member state to respond, due to heavy investments in energy or other transitions that would drive up interest rates up for individual members, or due to a combination of such developments. Such dynamics may trigger reactions from financial markets that will be more severe for countries with rather poor debt records. As a result, the ECB may be faced with varying interest rates which can trigger further destabilizing reactions (e.g. indebted countries may find it harder to finance loans).

Mounting public debts combined with a strong link between governments and national banks may affect the stability of banks (see the discussion of doom loops). In a monetary union, collective borrowing will even-out interest rates and may quiet down financial markets. Moreover, in the EMU countries no longer have the option of exchange rate adjustments. If, as is the case in the EU, internal labour mobility is low, economic fluctuations will result in unemployment particularly given the delay in wage reductions. A European social buffer will, in theory, help to smooth economic fluctuations. Similarly, because interest rates on EU bonds will be lower than the rates on debts from a number of member states, a fiscal union is regarded as being fair when it comes to major public investments.

Part of the discussion on fiscal union relates to the alleged advantages of the ability to pursue Keynesian policies when countries have run into difficulties. This assumes that

austerity has prevented investments in high-debt countries (for a critical discussion of this argument see Gros 2014 and Schout and Van Riel 2022).

Just to take an example of the many official EU proposals for deeper integration, in its Reflection Paper on Deepening the EMU (2017), the Commission makes far-reaching proposals about what is necessary in the long term to build a fiscal union, including the appointment of a European Minister for Economics and Finance, a European Monetary Fund (EMF), further steps towards a social union, and a fund for the liquidation of failed banks. In addition, the Commission wants to introduce the principle of joint liability (i.e. risk-sharing). This implies that the EU's and EMU's finances have to be increased through European taxes and related tax harmonization, and the introduction of eurobonds. The effect will be that the European minister of finances will be accountable to the EP and that the EP would develop into a full-grown parliament with power of the purse. President Juncker apparently trusted this model would be implemented soon and welcomed his new Commissioner for economic and financial affairs, Pierre Moscovici, in 2014 with the words that he "will be the finance minister of an entire continent, at the head of a European treasury" (Mérand 2021, p. 169).

In a recent study on the fiscal union Hoogduin and Van Der Kwaak (2022) estimate that, comparing transfers in the US, The Netherlands as net-contributor would contribute approximately net 2,5% of its GDP to the federal EU budget on an annual basis. This assessment of the costs of a fiscal union builds on the assumption about the required minimum federal budget of 15-20% of GDP (see Berger et al. 2018). Useful as it is to have such comparative studies to assess the proportions of fiscal integration, it is difficult to compare the EU to the US because of the different histories and specific historical developments. Many of the federal tasks belong historically to the national level (e.g. defence and social stabilization). As discussed, the EMU was created after the growth of welfare states. In this context, the estimate of Hoogduin and Van der Kwaak may be too high and is cooperation between member states with their fully developed welfare states in the EU is more realistic for the time being than integration. However, this type of discussion on the EU's fiscal union has to be separated from the discussion of the fiscal capacity required for stabilizing the eurozone.

Role of market and political signals: When economic policy responsibilities in the eurozone are shifted towards the EU level, the force of market signals are also more felt at the EU level. In itself, this may trigger moral hazard. However, part of the loss of market signals are with a fiscal union translated into political signals. Stronger countries will have to incur higher interest rates in case of common deficit financing, and this will trigger new kinds of political tensions. A fiscal capacity also implies a bigger demand for mutual solidarity.

For the EMU or EU more generally, the design of the fiscal union (e.g. related to bailing out member states or a more US style with more market signals for over indebted States and banks) will determine the strengths of the market and political signals.

Finally, deeper integration requires often unanimity, or a super majority. But it is not even clear whether the countries favouring deeper integration –of course supported by the EU institutions – account for a majority (of Member States and population). There seems to be a

'silent majority' of countries preferring to stick to European *cooperation* (Kassim and Schout 2023).

Administrative development/institutional capacities: Shifting tasks to the EU level will make the EU and the EMU less vulnerable to weak administrations in member states.⁶⁸ Subsidiarity will not be regarded as sharing of responsibilities and of managing interdependence but be largely interpreted as uploading tasks to the federal level (integration instead of cooperation).

In terms of European institutions, the EU Commission will become a true European government and the European Parliament will acquire the power of the purse.

Resilience: As other federations show, the deeper integration model is technically possible, and it can be equally resilient as BAU or other models (see below). However, under the current conditions, the EU may lack the mutual solidarity and the sense of being true Europeans.

In case interest rates or unemployment would rise, economic fluctuations will be moderated by the fiscal capacity, but as discussed, political tensions may increase at the same time.

Moreover, if member states are expected to go bankrupt, they can be stimulated to be more aware of the consequences of public debts.

Hence, it is difficult to predict the resilience of the eurozone.

Likelihood: Given the major shifts in budget responsibilities from the national to the EU level, and the expectation of permanent solidarity, this scenario is unlikely in the foreseeable future.

Consequences, risks or drivers of change: One consequence of not implementing the deeper integration scenario is that the eurozone may be confronted with economic up- and downturns with considerable amplitudes. A European fiscal buffer would in theory help to reduce economic swings. Moreover, much will depend on whether the EU Commission as economic government will be geared towards defending budgetary stability or whether it will be geared towards more flexible budgetary discipline. A lot will depend on the fiscal and administrative culture that will emerge in terms of being rule-based, the ability go bankrupt, and the availability of transparent and independent economic authorities.

5.4. Increasing divergence potentially leading to a break up

Description: As discussed above, differences in economic performance are a normal phenomenon in a monetary union. In the BAU scenario, the differences in income remain stable, which is compatible with the experience in the US or in Germany where some States and Bundesländer have stayed behind in terms of growth and development.

⁶⁸ We leave out here the distinction between EMU and EU and whether specific tasks are related to the functioning of the EMU.

The diverging scenario assumes that this stability is broken; differences between member states grow and trigger turbulence in the monetary union. Which kind of turbulence is most likely?

A divergence scenario can hypothetically emerge along the following lines. The contribution from NextGenEU may be insufficiently to produce enough productivity growth in Italy or to substantially reduce debts. Increasing interest rates coupled with increased risk aversion in financial markets worsen the growth prospect of highly indebted countries.

This results in tensions and increased frustrations within the eurozone, with countries experiencing high risk premia complaining about irrational markets and with countries with low debt/low risk premia countries complaining that the others do not undertake enough reforms. Contagion may arise as financial markets become more suspect of weaknesses in other weaker countries as happened in in the 2010s. If there are sudden jumps in the risk premium, the ECB might be inclined to initiate direct purchasing debts of sovereign debts without sticking to the capital key ('TPI') but in the end constraint by Court rulings and political tensions.

Meanwhile, possibly due to continued geopolitical unrest and high energy prices, inflation remains high and unemployment increases. Higher inflation reduces debts in real terms but economic slowdown and unemployment result in higher public deficits. These trends feed into a fall in mutual trust and an increasing support for parties in North and South that see their lack of trust in the euro project vindicated. It might not even take too much turmoil to kindle already existing dislikes of the euro or distrusts against each other.

Divergence could also be triggered by a growth spurt in the better off part of EMU (Northwest-Northeast). This would increase the differences between North and South, but it might also weaken the political resistance to explicit or implicit transfers and could thus be stabilising. Similarly, irritations rise if transfers turn out to be ineffective and nor result in reforms and growth where needed.

In the case of Italy, it is then to be expected that increasing debts are first of all seen as a responsibility for Italy itself. Italy is in terms of wealth per capita a relatively rich country.⁶⁹ The fiscal turbulence surrounding covid19 was seen as health crisis and financial solidarity proved to be possible in this specific situation. However, in a next economic eurocrisis, this solidarity may not exist. Hence, it will then be up to the Italian government how to convince Italian savers to hold the nation's debt and to remain trust in the eurozone. It is not impossible that political forces gain ground which convince part of the electorate that exiting the euro is a better option than externally imposed painful austerity.

Conditions: High debt levels and weak growth are the engines for turmoil in monetary unions (Reinhart and Rogoff 2010). In addition, geopolitical crises may continue, interest rates could rise and a next economic down-turn is always possible. How such set-backs translate into national instabilities is closely connected to the quality of political leadership (at home and in the EU), the quality of national institutions, and the ability to remain credibility with reform

⁶⁹ [Household accounts - Household net worth - OECD Data](#)

processes in the eyes of the financial markets. In addition, the history of monetary unions also show that exceptional circumstances are required – mostly in the form of a war with profound effects.

Subsidiarity: Divergence will in the first instance result in pressures to centralize. The EU, either through the EU Commission or, more likely, through the European Council with a starring role for the French-German axis, will attempt to impose more hierarchical supervision. Moreover, there will be renewed calls for additional European budgets and, relatedly, European taxation. Given the poor quality of national institutions that triggers a great deal of the turbulence, the tendency to centralization may solve some of the problems but it will not carry the required national legitimacy.

Role of market and political signals: Both market and political forces will operate in overdrive. This will help to clarify to the politicians throughout the EU of the stakes involved. Careful management is required to prevent market forces from overreacting. Political and economic banana peels have to be avoided. Yet, in the break-up scenario, one banana peel can trigger some sort of implosion of the eurozone.

Administrative development/Institutional capacities: Divergencies will initially put more pressure on central institutions. It will be important to see whether the ESM will return to its original role as European IMF or whether the – more political – Commission will take the front seat. However, as during the previous economic crisis, it is most likely to be an intergovernmental type of crisis management.

Resilience: The previous economic crisis resulted in new instruments and supervisory mechanisms. No country left the euro and in particular the countries that went through austerity and reform processes turned into top-performers (Schout and Van Riel 2022). Divergence can lead to resilience. For the time being, we conclude that the resilience under the divergence scenario should not be underestimated both from the side of the indebted countries as from countries with stronger economies.

Likelihood: A replay of the Greek crisis in 2010, or the second crisis around 2015 Grexit referendum is unlikely – at least for the foreseeable future because the economic fundamentals and the political situation are very different. As mentioned above, unlike Greece, Italy is running current account surpluses and has enough domestic savings to finance its own government. Moreover, the changing geopolitical environment (Russian aggression, China appearing more menacing) has increased the value of being part of the European construction.

Moreover, countries have been proved to turn the corner. Provided there is a stable leadership in Italy, it might follow the example of Portugal that moved from a programme country to a period of sustained growth and declining debt ratios.⁷⁰

Yet, the diverging scenario cannot be excluded. Although it is at this point in time not the most likely development, it is possible that for example Italy, with low growth and high debt,

⁷⁰ Another, for the time being more far fetches scenario, might be that of the UK which needed IMF programs in the 1970s with soured labour relations and later became a top-performer in the 1990s and early 2000s.

may end up in a scenario where it has to accept a restructuring of debt combined with a memorandum of understanding specifying reforms.

What is less likely at this point in time is that Italy or other countries will break-away from the eurozone. This also implies that a euro-holiday is at present not a realistic scenario. Furthermore, the introduction of a parallel currency by Italy is unlikely – legally as well as politically. The parallel currency will not gain much worth and a country may be de facto put outside the euro system as the ECB is not likely to offer any form of support. Moreover, if a parallel currency is introduced, the country will find it hard to operate with the newly introduced currency outside the eurozone as it will be in little demand.

Italy may follow, in case of divergence, the Greek experience. In terms of house hold wealth, Italy is one of the richest countries in the eurozone and other countries may highly reluctant to pay for its debt overhang. Greece has shown that a country (its political system, its electorate) may tinker with exit-plans is something different from actually exiting given the limited chances of being able to stand on one's own feet, lacking trust from the financial markets, and having to operate without the support of the ECB. However, bigger countries such as Italy (or as appeared: the UK) may make different choices than smaller countries (Katzenstein 1978). Hence, we cannot know for sure whether the 'tinkering but ultimately staying' Greek scenario is the most likely development in the diverging scenario.

Given its size, Italy may be also able to press for a Spanish scenario in which a formal memorandum of understanding is avoided but conditions have to be met nevertheless. Spain was not a formal programme country of the ESM. In the case of Italy, the Spanish scenario could well develop into a continuous battle over missing the targets in the MoU, followed by new hard-fought reform targets and the political battles within the eurozone flagged on the frontpages of the European press. The price of such a turbulent scenario will be a decline in mutual trust within the eurozone more generally including in the financial markets and higher interest rates for all involved. Such dynamics could push the eurozone closer to the edge.

Consequences: Papers on deepening the eurozone are plenty. Scenarios for unbundling have received much less scholarly attention. Neither trajectory is likely to result. The ongoing political frictions may however contribute to a drop support for the EU given its tendency to remain prone to crisis instead of offering a value added for citizens.

5.5. Minimum Model - Essential Economic Requirements for a stable Monetary Union

Description: Monetary unions differ and can vary in terms of tasks and depth of level of integration.

The US is an example of a highly integrated monetary union in terms of fiscal policy and monetary policy. The development of the system of the Federal Reserve Banks took place before the development of the modern welfare state. The US monetary system had remained fractured for 130 years. When the Federal Reserve was created in 1913 great care was taken to ensure that its 12 regional components encompassed several states with

different economic structures and in many cases the area of the regional central banks of FED do not coincide with the borders of the States they cover. The US also had no banking union until the large scale bank failures during the Great Depression created the political conditions for this step. During the early days of the FED there was still little understanding of the role of the FED nor of the importance of saving banks in distress. President Roosevelt in the 1930s had to take the radical step to close down the entire banking system, which had remained largely under the control of the States in early 1933. Banks could then re-start only under the new federal supervision. A similar evolution occurred with federal spending, which is now much larger than that of the States, but was much smaller than that of the States during the 1800s. The role of public sectors developed mainly throughout the 20th century when the American fiscal and monetary union were already created.⁷¹

The Nordic monetary union discussed above is an example of a light monetary union. Countries shared a currency and their central banks coordinated monetary policies but never developed a banking union or a common fiscal policy. Being less tightly interconnected, the Nordic union was easier to dismantle – even though it even initially had survived WW1.

The eurozone was already characterized by high-developed national welfare systems when it was created. Current shares of public spending vary from 30% of GDP (Ireland) to around 60% as in the case of France. Given the existing national welfare states, the EU is generally based on cooperation between member states rather than on integration/centralization with only very limited common expenditure (1,2 % of GDP). A larger European fiscal capacity would demand serious reforms of national welfare states. Given that such a rewinding of national tasks and budgets is unrealistic, the Minimum Model is more or less unavoidable.

Hence, each monetary has its own historical background and specific development trajectory so that there is no clear model for a monetary union. This raises the question of what can be defined as the minimum requirements of a monetary union? Put differently, could the EMU's light fiscal structure be sustainable.

Economic theory and experience suggest that a minimum model can work provided four preconditions are fulfilled:

- Member states keep enough fiscal space to deal with recurrent business cycle shocks
- National institutions are strong enough to offer optimal conditions for independent and transparent monitoring and control of national fiscal policies. Similarly, national institutions need to ensure a (high) quality of essential state functions such as independent legal system, education, social stabilization, reliable statistics, etc. (for details see Schout 2017, Schout and Van Riel 2022)
- Mechanisms and common funds are available to ensure systemic financial stability in case Member States are hit by extraordinary shocks

⁷¹ The fiscal capacity in the US was 35% (public spending to GDP) in 2018 but this figure went up to 48% in 2020 due to covid19 and has not yet found a new stable level. See [United States Government Spending To GDP - 2022 Data - 2023 Forecast \(tradingeconomics.com\)](#), last consulted 17 January 2023.

- The Minimum Model requires effective multilevel cooperation (see Chapter 4* on subsidiarity as necessary requirement for a federal and monetary union).

The minimum model is subsidiarity based with national and European responsibilities and quality requirements. Member States should have their own first line of defense against shocks. Adherence to the reference value of debt (now set at 60% of GDP), contained in the Treaty, should ensure a sizeable protection against even major disturbances. Nevertheless, every now and then a crisis can emerge that has a systemic impact such as an energy crisis, the outbreak of a war for example involving China, or an economic bubble that was -with hindsight- underestimated. In these cases, even a debt level of 60% of GDP may not be sufficient to cover expenses and maintain trust from the financial markets. Depending on the nature of the shock financial security mechanisms are needed such a banking fund, loans from the EMS (in case of a liquidity crisis), or direct assistance from the EU budget in case of really 'once in a generation' shocks whose impact was not foreseeable and was not related to excessive deficits or debt.

How big these funds have to be will depend on the specific cases and how many countries are hit particularly hard. The emergency fund will therefore have to be decided on a case-by-case basis, while being reserved for exceptional circumstances. In the minimum model, a form of euro-bonds (as in the NGEU or SURE model) is a possibility if the loans are based on repayments by the member states.⁷²

In the minimum model, the financial back-up from the ESM is loan-based comparable to the use of the IMF funding and linked to adjustment programs to ensure that member states will regain market access and as a political price to ensure the Member States remain aware of the risks involved when eroding their financial buffers.

Conditions: The minimum model is in principle fit for most possible scenarios given its flexible. It does assume mutual solidarity understood as an insurance system because every country could be hit by shock. One prerequisite is that national governments respect the spirit of the rules on state debt, and that national institutions are independent and strong enough to monitor trends and to adapt to new situations. The respect for the rules implies that countries try to prevent offloading responsibilities and risks to the higher level and that the higher level does not seek tasks that limit the national responsibilities.

Evidently, for political reasons, member states may agree to opt for more centralized structures for example if there is insufficient trust in the qualities of partner countries. Centralization of tasks will however demand more from the central institutions and it will be more difficult for member states to tune policies to the specificities of national welfare functions. Moreover, cost-calculations change if tasks are offloaded to the central level (e.g. more elaborate risk sharing at the central level may change financial risk perceptions at the national level).

Subsidiarity as precondition for multilevel cooperation: Of the four models, the minimum model is most in line with networked-based cooperation. Member states need to well equipped, and networks have to have a collective set of rules (including on independent

⁷² The repayment of the loans and grants in the NGEU have not been clearly defined.

monitoring and procedures for mutual inspections). The Commission has to supervise the effectiveness of the network and initiate corrective actions including going to Court if need be. As discussed above, successful EU policy areas such as competition policy function on the basis of the Minimum Model.

Assessment of resilience: This is the most resilient scenario. Risks remain in principle at the level of the individual governments in the planning their expenditures. In addition to the national responsiveness to changes in welfare functions, the minimum model has layered systems of quality control on national institutions and of insurances against disturbances.

In fact in cybernetic terms the system is an ultra stable system as it has a learning and response capacity at the national level (first feedback level), and mechanisms for dealing with turbulence that threaten the system (second feedback level) (compare Ashby 1960 Ch.8).

The system places high demands on national and European institutions to ensure that minimum model is respected. Politicians may want to downplay risks or prefer for political reasons to shift responsibilities to a higher level.

Hence, safeguarding the minimum model may require opt-outs for member states in case EU policies are decided that are not essential for the resilience of the euro system (Schout 2021). The minimum model can offer resilience to the eurozone, but the model itself is subject to continuous demands for deeper integration.

Consequences/risks: Economic risks are insured in the minimum model. A political risk, common to all the scenarios, is that governments cannot agree on sufficient European actions. However, following the discussions on the difficulties involved in a break-up, we expect that the governments will, albeit through a process of too-little-too-late, find appropriate actions. If the basic rules are accepted, countries will have their own buffers and lower debt levels help to reduce the number of EU level financial crisis.

Likelihood: A distinction has to be made between short-term and long-term likelihood. In the short run, the minimum model may seem less likely. However, learning from experience with crises may result in a system with stronger member states less in need of support so that in the longer-term flexible risk insurance as discussed will suffice. Currently we already see the realization growing throughout the EU that weaknesses have to be primarily at the national level (European Commission 2015, Schout and Van Riel 2022).

REFERENCES

- Alberola, E., Cheng, G., Consiglio, A. and Zenios, S. A. (2022), Debt sustainability and monetary policy: the case of ECB asset purchases. Available at SSRN 4254184.
- Alcidi, C., and Gros, D. (2019), 'Public debt and the risk premium: a dangerous doom loop', *CEPS Policy Insights*, (2019-06).
- Antenbrink, F. and De Haan, J. (2003), 'Economic governance in the European Union: Fiscal policy discipline versus flexibility', *Common Market L. Rev.*, 40, 1075.
- Angeloni, I. and Gros, D. (2022). How can the ECB deal with the risk of fragmentation?. CEPS Policy Insight 2022-27, https://www.ceps.eu/wp-content/uploads/2022/07/CEPS-PI2022-27_The-ECB-and-fragmentation-risk.pdf.
- Baldwin, R.E. and Wyplosz, C. (2006), *The economics of European integration*, 2nd ed., London, McGraw-Hill Education.
- Bank for International Settlements (2022), 'OTC foreign exchange turnover in April 2022', https://www.bis.org/statistics/rpfx22_fx.htm#:~:text=Turnover%20by%20currency%20and%20currency%20pairs&text=The%20euro%20continued%20to%20be,from%2032%25%20in%202019).
- BBC (2012), 'Five ways the euro could break up', 4-04-2012. [Five ways the eurozone could break up - BBC News](#).
- BBC (2015), 'Wolfgang Schaeuble: Germany's man with a Grexit plan', 14-07-2015. [Wolfgang Schaeuble: Germany's man with a Grexit plan - BBC News](#).
- Belke, A. and Gros, D. (2020), 'The Euro area imbalances narrative in a Franco-German perspective: The importance of the longer-run view', *Ruhr Economic Papers*, No. 843, ISBN 978-3-86788-978-0, RWI - Leibniz-Institut für Wirtschaftsforschung, Essen, <https://doi.org/10.4419/86788978>.
- Capolongo, A., Eichengreen, B. and Gros, D. (2020), 'Safely increasing the supply of safe assets: Internationalising the euro in the age of COVID-19', *VoxEU.org*, 23.
- Chaffin, J. (2011), 'Europe close to creating 'budget tsar'', *FT*, [Europe close to creating 'budget tsar' | Financial Times \(ft.com\)](#)
- Comments on the latest Greek proposals (2015), [GRC-10.7.2015-en \(2\) \(2\) \(2\) \(sven-giegold.de\)](#).
- Communiqué of the meeting of Heads of State or Government of the Member States at The Hague (1 and 2 December 1969). [Final communiqué of the Hague Summit \(2 December 1969\) - CVCE Website](#)
- Compare North, D.C. (1990), *Institutions, Institutional change and economic performance*, 1st ed. Cambridge: Cambridge University Press.
- Dam, A., Ten (2017), 'DE EURO: SLIKKEN, STIKKEN OF FLEXIBILISEREN?', *Clingendael: Clingendael Spectator*. [De euro: slikken, stikken of flexibiliseren? | Clingendael Spectator](#)
- Dam, A., J. Wanningen (undated) 'How Italy can set its own monetary policies and keep the Euro', <https://gefira.org/en/2018/12/20/how-italy-can-set-its-own-monetary-policies-and-keep-the-euro/>

- De Grauwe, P and Ji, Y. (2021), 'Mispricing of Sovereign Risk and Multiple Equilibria in the Eurozone', CEPS Working Paper No. 361, CEPS, <https://www.ceps.eu/ceps-publications/mispricing-sovereign-risk-and-multiple-equilibria-eurozone/>.
- De Standaard (2023), België's budgettaire situatie is 'duidelijk onhoudbaar', 23.1.23. [België's budgettaire situatie is 'duidelijk onhoudbaar' | De Standaard](#)
- De Telegraaf (2022), ['Nederlandse spaarders grootste verliezers in Europa' | Geld | Telegraaf.nl](#)
- Dendrinou, V. and Varvitsioti, E. (2019), *The Last Bluff: How Greece Came Face-to-Face with Financial Catastrophe and the Secret Plan for its Euro Exit*, Papadopoulos Publishing.
- Deutscher Bundestag (2010), 'Scheitert der Euro, dann scheitert Europa', https://www.bundestag.de/webarchiv/textarchiv/2010/29826227_kw20_de_stabilisierungsmechanismus-201760.
- Dinan, D. (2016), 'Governance and institutions: A more political commission', *Journal of Common Market Studies*, 54, 101.
- ECB (2010), 'ECB decides on measures to address severe tensions in financial markets', <https://www.ecb.europa.eu/press/pr/date/2010/html/pr100510.en.html>.
- ECB (2013), 'Outright Monetary Transactions, one year on', Speech by Benoît Cœuré, Member of the Executive Board of the ECB, at the conference "The ECB and its OMT programme", organised by Centre for Economic Policy Research, German Institute for Economic Research and KfW Bankengruppe Berlin, <https://www.ecb.europa.eu/press/key/date/2013/html/sp130902.en.html>.
- Economist (1999), "Germany the sick man of the euro", <https://www.economist.com/special/1999/06/03/the-sick-man-of-the-euro>
- Eichengreen and Flandreau (2019)
- European Commission (1988), "The Economics of 1992: An Assessment of the Potential Economic Effects of Completing the Internal Market of the European Economy", *European Economy*, No. 35, March.
- European Commission (2001). *European Governance: A White Paper*. COM (2001) 428, final, 25 July. Brussels: CEC.
- European Commission (2022), 'Building an economic governance framework fit for the challenges ahead', November, https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6562
- European Stability Mechanism, Programme Overview, <https://www.esm.europa.eu/financial-assistance/programme-database/programme-overview>
- European Union, Standard Eurobarometer 97 - Summer 2022, <https://europa.eu/eurobarometer/surveys/detail/2693>.
- Expatica (2005), 'Euro collapse report "absurd": Bundesbank chief', <https://www.expatica.com/de/general/euro-collapse-report-absurd-bundesbank-chief-100795/>
- Frieden, J. (2016), 'Lessons for the euro from early American monetary and financial history', Brussels: Bruegel. [Essay series \(bruegel.org\)](#).
- Fuest C. and Pisani-Ferry F. (2019), *A Primer on Developing European Public Goods*. [A Primer on Developing European Public Goods | Publication | Econpol Europe](#)

- Giavazzi F. and Pagano, M. (1999), 'Confidence Crises and Public Debt Management', NBER Working Paper 2926, DOI 10.3386/w2926, <https://www.nber.org/papers/w2926>.
- Gopinath, G., Boz, E., Casas, C., Díez, F. J., Gourinchas, P. O. and Plagborg-Møller, M. (2020), 'Dominant currency paradigm', *American Economic Review*, 110(3), 677-719.
- Gros, D. (2012), 'A simple model of multiple equilibria and sovereign default', CEPS Working Document No. 366, CEPS, <https://www.ceps.eu/ceps-publications/simple-model-multiple-equilibria-and-sovereign-default/>.
- Gros, D. (2018), 'How to exit the euro in a nutshell – "Il Piano Savona"', CEPS Commentary, CEPS, <https://www.ceps.eu/ceps-publications/how-exit-euro-nutshell-il-piano-savona/>.
- Gros, D. (2018), 'Italian risk spreads: Fiscal versus redenomination risk', VOX.eu, <https://cepr.org/voxeu/columns/italian-risk-spreads-fiscal-versus-redenomination-risk>.
- Gros, D. (2021). *Wrestling with Maastricht in France, Germany and Italy. The Role of the Intellectual Framework. The Value of Money. Controversial Economics Cultures in Europe: Italy and Germany*, Villa Vigoni Verlag.
- Gros, D., and Thygesen, N. (1993), *European Monetary Integration*, Addison-Wesley Longman Ltd. Dam, A. ten, *De Euro: slikken, stikken of Flexibiliseren*, [De euro: slikken, stikken of flexibiliseren? | Clingendael Spectator](#).
- Haroche, P. (2022), 'A "Geopolitical Commission": Supranationalism Meets Global Power Competition', *JCMS: Journal of Common Market Studies*.
- Heise, M. (2013), 'What Went Wrong with Public Debt and Macroeconomic Stabilization?', in *Emerging from the Euro Debt Crisis*, pp. 51-65, Springer, Berlin, Heidelberg.
- Hoekstra, R., Horstmann, C., Knabl, J., Kruse, D. and Wiedemann, S. (2007), *Germanizing Europe? The evolution of the European Stability and Growth Pact*, No. 24, Arbeitspapiere für Staatswissenschaft.
- Jordan, A., J.A. Schout (2006) *The coordination of European Governance: exploring the capacities for networked governance*, Oxford: Oxford University Press.
- Kamps, C., & Leiner-Killinger, N. (2019). Taking stock of the functioning of the EU fiscal rules and options for reform. Available at SSRN 3445380.
- Krugman, P. (2012), *Revenge of the Optimum Currency Area*, NBER Macroeconomics Annual, <https://www.journals.uchicago.edu/toc/ma/current>
- Meyer, D., M. Vogelsang, A. Beer, A. ten Dam (2011) 'Eurokrise: Ist eine temporäre Einführung einer Parallelwährung in den Krisenstaaten eine Lösung?', IFO Institut: Aufsatz in Zeitschrift. <https://www.ifo.de/publikationen/2011/aufsatz-zeitschrift/eurokrise-ist-eine-temporaere-einfuehrung-einer>
- Miskimmon, A., W. Patterson (2023), 'Between the devil and the deep blue sea: German Narratives of Europapolitik', in Schout, A., H. Kassim (eds). *National Government Narratives of the EU: 'Official stories' compared*, Palgrave.
- Mundell, R. (1961), 'A Theory of Optimal Currency Areas', *American Economic Review* 51 (4): 657-665.
- Mundell, R. A. (1961), 'A theory of optimum currency areas', *The American economic review*, 51(4), 657-665.
- Nederlandsdagblad (2005), [Gulden te goedkoop de euro ingeloodst - Nederlands Dagblad. De kwaliteitskrant van christelijk Nederland](#)
- OECD (2023), Household net worth, [Household accounts - Household net worth - OECD Data](#)

- Pansardi, P. and Tortola, P. D. (2022), 'A "More Political" Commission? Reassessing EC Politicization through Language', *JCMS: Journal of Common Market Studies*, 60(4), 1047-1068.
- Paolo, M. (2019), 'A brief explainer of mini-bots, Italy's parallel currency', *Italics Magazine*, [A Brief Explainer Of Mini-BOTs, Italy's Parallel Currency \(italicsmag.com\)](https://italicsmag.com)
- Papadia, F. and Roth, A. (2019), 'Mini-BOT in the government programme of the Five Star Movement and the League', <https://www.bruegel.org/blog-post/mini-bot-government-programme-five-star-movement-and-league>
- Rijksoverheid.nl, [Kamerbrief vertrouwelijk informeren over crisisscenario's euro | Kamerstuk | Rijksoverheid.nl](https://www.rijksoverheid.nl/onderwerpen/euro/kamerstukken/kamerbrief-vertrouwelijk-informereren-over-crisisscenario-s-euro)
- Riksbank (2022), "The Riksbank's losses do not reflect the socio-economic results", <https://www.riksbank.se/en-gb/press-and-published/speeches-and-presentations/2022/the-riksbanks-losses-do-not-reflect-the-socio-economic-results/>
- Schout, A. (2011), 'Framework for assessing the added value of an EU agency' *Journal of Public Policy*, 31(3), 363–384.
- Schout, A. (2017) "The EU's existential threat: demands for flexibility in an EU based on rules", in: Pirozzi, N. (ed.) *EU60: Re-founding Europe; The responsibility to propose*, Rome: IAI. <http://www.iai.it/en/publicazioni/eus-existential-threat>
- Schout, A. (2020), 'Economic governance from rules to management', *Clingendael policy paper*, [Economic Governance from Rules to Management | Clingendael](https://www.clingendael.org/publication/economic-governance-from-rules-to-management).
- Schout, A. (2021a), *Europese integratie en Europese samenwerking: als meer van hetzelfde niet werkt*, Nijmegen: Radboud Universiteit. [Oratie prof. dr. Adriaan Schout - Europa: 'Best Mogelijk' | Clingendael](https://www.clingendael.org/publication/oratie-prof-dr-adriaan-schout-europa-best-mogelijk)
- Schout, A. (2021b), *The RRF as administrative subsidiarity*, Clingendael: Policy Brief. [The RRF as administrative subsidiarity.pdf \(clingendael.org\)](https://www.clingendael.org/publication/the-rrf-as-administrative-subsidiarity)
- Schout, A. (2022), *Subsidiarity as a Model for the EU*, Brussels: MartensCentre. [EU Subsidiarity as an Antidote to Centralisation and Inefficiency | Martens Centre](https://www.martenscentre.eu/publication/subsidiarity-as-a-model-for-the-eu)
- Schout, A., A. Jordan (2010) 'From 'Old' to 'New' Governance in the EU: Explaining a Diagnostic Deficit', *West European Politics* 33(1), p. 154-170.
- Schout, A., Ch. Schwieter (2018) 'National Fiscal Councils, the European Fiscal Board and National Productivity Boards - New EMU independent bodies without much prospect' <https://www.clingendael.org/pub/2018/clingendael-state-of-the-union-2018/5-new-emu-independent-bodies/>
- Schout, A., I. Blankesteijn (2020) 'Diagnosing enforcement of EU border control', Clingendael Policy Paper, 2020. <https://www.clingendael.org/publication/diagnosing-enforcement-eu-border-control>
- Schout, A. A. van Riel (2022), *The state of economic convergence in the Eurozone. Two decades of monetary union and economic governance*, Policy Paper written for the Ministry of Foreign Affairs to support the Dutch input on SGP reform. [The state of economic convergence in the Eurozone | Clingendael](https://www.clingendael.org/publication/the-state-of-economic-convergence-in-the-eurozone)

Schout, A, H. Kassim (2023), "'Official Stories' in comparative perspective. Different ways of narrating belonging", in H. Kassim and A. Schout, *National Government Narratives of the EU: 'Official stories' compared*, Palgrave (forthcoming).

Single Resolution Board, Single Resolution Fund (SRF), <https://www.srb.europa.eu/en/single-resolution-fund>

Sinn, H. W. (1996), International implications of German unification.

Sinn, H. W. (2007), *Can Germany be saved?: the malaise of the world's first welfare state*. Mit Press.

The Guardian (2011), 'EU leaders tell Italy: stop the rot and get your house in order', [EU leaders tell Italy: stop the rot and get your house in order | Eurozone crisis | The Guardian](#)

The Guardian (2013), 'Wolfgang Schäuble: Greece could get more help, but debt haircut talk must end - eurozone crisis as it happened', 18-07 [Wolfgang Schäuble: Greece could get more help, but debt haircut talk must end - eurozone crisis as it happened | Business | The Guardian](#)

The Telegraph (2012), 'Lord Wolfson prize: How to escape the euro with the minimum of pain', 4-04-. [Lord Wolfson prize: How to escape the euro with the minimum of pain \(telegraph.co.uk\)](#)

Trading Economics, United States Government Spending To GDP, [United States Government Spending To GDP - 2022 Data - 2023 Forecast \(tradingeconomics.com\)](#), last consulted 17 January 2023.

Verdun, A. (2013), The building of economic governance in the European Union. *Transfer: European review of labour and research*, 19(1), 23-35.

Walter, B. (1866), *The Economist*, Flandreau, La convention monétaire de 1865 entre la France, la Belgique, l'Italie et la Suisse, in: *Politique étrangère*, n°3 - 1998 - 63^e année. pp. 659-666, www.persee.fr/doc/polit_0032-342x_1998_num_63_3_4787

Wanningen, J. (2019), *Eurodynamica: Van samenwerkingsverband naar transferunie*, De Vrije Uitgevers.

Wim Boonstra over contant geld, CBDC, noodplan euro en toekomst EU - Holland Gold in debat #5, podcast, [Holland Gold: Wim Boonstra over contant geld, CBDC, noodplan euro en toekomst EU - Holland Gold in debat #5 on Apple Podcasts](#)

ANNEX 1. SOUNDING BOARD MEETING

Present:

Members of the Sounding Board⁷³: Cinzia Alcidi, Arnoud Boot, Amy Verdun, Charles Wyplosz

Project leaders: Daniel Gros, Adriaan Schout

Date: 6 January 2023 - 09.15/10.45 hrs

Title draft report: SCENARIOS FOR THE EUROZONE - A realistic perspective between hopes and fears

The first major item the meeting discussed concerned the importance of a realistic tone regarding the achievements and future challenges of the euro. Given the heated debates on the euro, it is important to stay as much as possible away from political statements as confusion over conclusions are easily created. The meeting agreed that, as also presented in the draft report, the eurozone performed in economic terms in many ways comparable to similar countries elsewhere.

The discussion also underlined qualifications of the importance of the euro. The euro is one of major developments in European integration but not the only development. The economic performance of eurozone countries -- individually as well as collectively -- depends on a wide spectrum of national and European choices. It is hard to isolate the role and impact of the monetary union and its functioning. By the same token, the functioning of, and the public support for, the euro cannot be seen in isolation from the wider performance of the EU such as for example in relation to migration flows and geopolitical crises. Contrary to what has been done in the past, in this collection of wider trends and incentives, realism requires that high expectations and alleged disappointments should be nuanced because they attribute too much influence to monetary policy. On the whole, money is more neutral in the long run than political debates sometimes acknowledge (barring situations of sustained hyper-inflation). A nuanced picture requires a careful weighing of overpromises and allegations of under-delivery.

As many of the debates on the euro concern the extent to which convergence has been achieved, it is important to specify that the report focusses on nominal (debt levels, interest rates, inflation) and real (growth) convergence. The report rightly underlines that most countries converged reasonably whereas there are only a few longer-term laggards. The lack of convergence that is clearly visible has however little to do with the euro. In any case, in terms of nominal convergence, the rules in the SGP have helped to instil a shared acceptance for fiscal discipline in general.

⁷³ The arguments and conclusions in the Report do not reflect the positions of the (individual members of the) Sounding Board.

The Board recognised the relevance of defining the minimum model for a monetary union. This model helps to distinguish between the economic requirements of EMU and the political preferences and ambitions with the eurozone and the EU more generally.

A point of specific attention concerned the principle of subsidiarity. It is important to link the discussions on subsidiarity to the functioning of EMU. In monetary terms, subsidiarity implies a loss of national responsibilities (centralisation – there is only one money and one interest rate). In terms of economic cooperation, discussions in the eurozone should pay more attention to proper definitions of national and European roles and responsibilities. This will have, among others, major implications for the functioning of the European Commission.

Any discussion on scenarios for the euro is bound to be technical. The challenge for the report is to find a balance between technicalities and readability.

The scenarios in the draft report are:

- 1) BAU (Business As Usual). BAU represents a sort of frozen conflict between two competing models. Changes in economic governance are made incrementally following compromises without finding a specific balance. This is the most likely scenario. Although stable in itself and performing reasonably well, the problem with BAU is that it lacks consensus on economic governance (neither on in “logic of appropriateness” nor on “logic of consequences”) and hence is prone to conflicts.
- 2) Deeper integration: Basically the fiscal union. Not very likely, probably not necessary and politically hazardous.
- 3) Divergence: Break-up scenario. Not very likely given political and economic costs both for strong and weak countries alike.
- 4) Convergence: Subsidiarity-based scenario in which member states are strengthened member states through involvement. This is not the same as an intergovernmental scenario in which the roles of the centre are minimized. Full convergence is not likely and not necessary either.

These scenarios are partly based a discussion on the role of (economic) signals (more than market forces) and on the discussion of subsidiarity as core principle also in economic governance.

The scenarios result in the formulation of the minimum model for monetary union.

ANNEX 2. RESEARCH ASSIGNMENT

Research study on the future of the EURO and the EMU



Research study on the future of the Euro and the EMU.

Introduction

The ECR Group in the European Parliament - Vice-Chair of the Committee on Economic and Monetary Affairs, Michiel Hoogeveen, and Chair of the Committee on Budgets, Johan van Oortveldt, - launch a tender for an independent research study regarding the future of the Euro and the Economic and Monetary Union (EMU). The study should be performed by an accredited European research centre or think tank. The researching party should be able to proof an extensive experience in research in European economics and political affairs.

This report defines the research assignment and specifies what the expectations are regarding the content of the final research report, the hard copy deliverables, the political communication and the presentation of the final report.

The research description clarifies the subject of this research, namely the future of the Euro and the Monetary Union. It analysis the current situation including problem drivers, problems and consequences. It then concludes with the objectives that the final research report needs to meet.

The research content provides a preliminary explanation on what the research strategy and subject matter of the report should be about. This should be seen as the minimum requirement. We expect an extensive research outline in which the service provider demonstrates its knowledge and unique researching strategy on the subject matter. After receiving and evaluating the different research proposals, the principal will select the research agency that seems most fit and brings a unique researching strategy to the table.

The report continues to explain procedural matters such as the research report deadline, deliverables, political communication and contact details.

It concludes by explaining when the tender should be handed in. It should be noted that any delivery after this deadline will not be taken into account. Finally, the appendix contains the official call for tender.



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Research description

This independent scientific research study should focus on the future of the euro and the EMU. The goal is to develop and assess all factual scenarios on how the Eurozone could develop. This project seeks to map fragility, alternative development scenarios and the related benefits and risks for member states and the EU as a whole. The report should do so without making a political value judgement.

Problem definition

Problem drivers: 1. High government debts. 2. Low interest rates 3. Expansive monetary policy. 4. Post-COVID economic bottlenecks.

Problems: 1. Difficulties in monitoring and managing economic stability risks. 2. Inefficiencies in managing inflation.

Consequences: 1. Divergent economies, which form a threat to market- and euro stability. 2. Inefficiencies in the internal market. 3. Inadequate protection of buying power of lower- and middle class.

Objective research

Specific objectives: The final research report should carefully inform policy makers and enable them to make well-informed decisions in the legislative process. The main objective of these services is to support the work of the Members of the European Parliament in guarding the Treaties and respect for the Rule of Law of the European Union. The report is meant for political communication for which there should be media coverage (e.g. newspapers, webinars and social media). After finalization, the researchers present the report to EU experts, politicians and journalists in a meeting organised for that purpose.



Research content

The final research report is expected to contain a thorough and scientific analysis of the current state of the euro and the Economic and Monetary Union (EMU). Not only should it give a description of the current situation, it should also provide a multifaceted analysis of all possible developing scenarios of the Euro. The below scenario's should be seen as a starting from which the researching party can build its own unique research proposal.

At first, we are interested in learning about the quality of EMU governance and the expectations of deeper integration. On the other side, there is the scenario of partial unbundling of the euro zone. Then there is the scenario of integration by cooperation.

- Scenario 1: Models, components and (political and economic) expectations of deeper integration.
- Scenario 2: Models, components and (political and economic) expectations of (partial) unbundling.
- Scenario 3: Models, components and (political and economic) expectations of integration by cooperation.
- Conclusions

The subject matter is highly contested and of great importance to the economic stability and welfare of many Europeans. It is therefore of great importance to carry out this research in the most complete way in which all possible scenarios are discussed and analysed. Only so, policy makers can make decisions grounded on scientific research, which serve the long-term interest of the people by ensuring a stable and thriving economy.

Procedural matters

General information about the procedure

Assignor

The contracting authority is the political group of the European Conservatives and Reformists in the European Parliament.

The European Conservatives and Reformists is a political group in the European Parliament set up around the European Reform Movement after the 2009 European elections.

Address: ATR 02L036, European Parliament, Rue Wiertz 60, Brussels 1047, Belgium, web page: <https://www.ecrgroup.eu>

Contact details

- Michiel Hoogeveen
 - michiel.hoogeveen@europarl.europa.eu
- Johan van Overtveldt
 - johan.vanovertveldt@europarl.europa.eu

Services required

With the finishing of the work the service provider is obliged to provide the client with the work by sending an electronic version in English and Dutch to michiel.hoogeveen@europarl.europa.eu and johan.vanovertveldt@europarl.europa.eu and a Dutch hard copy to the respective offices.



Requirements to the participants and the offer

Requirements to the content and the scope of the offer

To participate in the procedure, the participant must submit an offer prepared under the terms and conditions of these instructions for participation. It shall be submitted within the time limit and to the e-mail address specified in these instructions.

Deadline for submission of tenders: 26-09-2022

Each participant can submit only one tender under this procedure. The tender shall be prepared and submitted in English.

Content of the offer:

The offer must contain the following information of the participants in the tender procedure:

1. Details of the applicant:
 - Names of the official representative and contact person
 - Address and correspondence address (if different from the management address)
 - Phone number
 - E-mail

2. Offered price in EUR, both per hour and a total price, excluding VAT*
 - All prices in the offer must be in euros, excl. VAT, according to Art. 151 of Directive 2006/112 / EC and Art. 13 of Directive 2008/118 / EC.

3. All tenders must:
 - Be drawn up on the tenderer's headed paper.
 - Be signed without fail by the official representatives of the companies or by the natural persons submitting the offer.
 - Be perfectly legible so as to preclude any doubt whatsoever as to the wording and figures.

The tender must be addressed to:

ECR Group in the European Parliament
European Parliament
Rue Wiertz 60, Brussels 1047, Belgium

and to be send to:

European Conservatives and Reformists Group • www.ecrgroup.eu
European Parliament • ATR 02K0.. • Rue Wiertz, B • 1047 Brussels
Tel.: (32) 02 2839 • E-mail:.....@europarl.europa.eu

e-mail: michiel.hoogeveen@europarl.europa.eu



Selection and award criteria for selection

You are required to send us the CV's of the researchers responsible for the report. Their application must highlight an expertise in the requested field. Furthermore, we expect an invoice of the calculated costs. The invoice should clarify the price setting, using the following selection and award criteria:

- Price 30%
- Experience in the field 30%
- Originality 20%
- Timing: 20%

Exclusion

The tender should be handed in before the due date of 15 September 2022. Any proposals handed in after this date cannot be taken into account and will therefore automatically be excluded from the selection process. If any questions arise about the research assignment or the tender that should be delivered, make sure to get in contact on time, following the contact details below.

Obligations

This invitation to tender does not entail any obligation on the part of the ECR Group; that shall arise only when the engagement letter is signed with the selected successful tenderer. Until such letter is signed the ECR Group may either withdraw from the contract or cancel the procurement procedure, without tenderers being able to claim any compensation. If appropriate, the reasons for such a decision will be stated and communicated to the tenderers.

Deadline

After the due date of tender collection, the selection process is started based on the selection and award criteria. If your tender is accepted, a research contract will be signed between the two parties. The service provider is obliged to finish the work at the latest on: 31-10-2022.



Contractual and financial conditions

The contract for the implementation of this procedure will be concluded with a tenderer whose offer is ranked first according to the criteria.

The contract for the implementation of this procedure will be concluded in the form of a framework contract for provision of services.

The signing of this contract imposes no obligation on the client to place orders. Only the implementation of the contract through order forms is binding on the client. The price shall be firm and not open to revision for the entire duration of this contract

Deliverables and political communication

- Hardbound report in Dutch
- Online report in both Dutch as English
- Media coverage
- Presentation of report to EU experts, politicians and journalists.

Copyrights

The ECR Group will receive the copyrights of all services and materials produced following this tender procedure.

Information

You will be informed in writing of the decision taken on your tender.

Appendixes

Appendix 1 - Call for tender

Name Street Address E-mail

30 August 2022, Brussels

Subject: Public Procurement for a Research Assignment on the future of the EURO and the European Monetary Union (EMU).

Dear,

With this letter we want to inform you of a public procurement procedure that can be of interest to you. The ECR Group in the European Parliament (namely MEP Michiel Hoogeveen and MEP Johan Van Overtveldt) launches a tender for a policy paper on the future of the Euro and the European Monetary Union (EMU).

This tender concerns a policy paper that should contain a thorough and scientific analysis of the current state of the euro and the Economic and Monetary Union (EMU). Not only should it give a description of the current situation, it should also provide a multifaceted analysis of all possible developing scenarios of the Euro. At first, we are interested in learning about the quality of EMU governance and the expectations of deeper integration. On the other side, there is the scenario of partial unbundling of the euro zone. Then there is the scenario of integration by cooperation.

The below scenario's should be seen as a starting from which the researching party can build its own unique research proposal.

- Scenario 1: Models, components and (political and economic) expectations of deeper integration.
- Scenario 2: Models, components and (political and economic) expectations of (partial) unbundling.
- Scenario 3: Models, components and (political and economic) expectations of integration by cooperation.
- Conclusions

This policy paper should support the work of the Members of the European Parliament in guarding the Treaties and respect for the Rule of Law of the European Union.



You are required to send us the CV's of the researchers concerned and these should highlight their expertise in the requested field. Furthermore, we request an invoice of the calculated costs. The invoice should clarify the price setting and should be without VAT according to Art. 151 of Directive 2006/112 / EC and Art. 13 of Directive 2008/118 / EC. The ECR Group will select the winner of the present tender based on the following selection and award criteria: 30% price, 30% experience in the field, 20% originality and 20% timing.

The service provider is obliged to finish the work at the latest on the 31th of October 2022. Simultaneously with the finishing of the work the service provider is obliged to provide the client with the work by sending an electronic version in English and Dutch to michiel.hoogeveen@europarl.europa.eu and johan.vanovertveldt@europarl.europa.eu and a Dutch hard copy to the respective offices.

The payment will be made after the work has been done and after providing all suitable documents related to the work performed (namely, the invoice and the policy paper concerned).

If you are interested in taking part in this tender procedure you can react by email before the 26th of September 2022 to the email addresses michiel.hoogeveen@europarl.europa.eu and johan.vanovertveldt@europarl.europa.eu.

This invitation to tender does not entail any obligation on the part of the ECR Group; that shall arise only when the engagement letter is signed with the selected successful tenderer. Until such letter is signed the ECR Group may either withdraw from the contract or cancel the procurement procedure, without tenderers being able to claim any compensation. If appropriate, the reasons for such a decision will be stated and communicated to the tenderers.

Please find attached the more extensive research assignment, including all procedural matters.

I thank you for your interest in the work of the ECR Group.

Yours sincerely,

MEP Michiel Hoogeveen

MEP Johan Van Overtveldt

Members of the ECR Group
European Parliament
Wiertzstraat 60
B-1047 - Brussels

Appendix 2 - Timeline

Step	Description	Timeline
1	Call for tender	30 August 2022
2	Selection + acceptance- and rejection letter	26 September 2022
3	Contract	3 October 2022
4	Start research	3 October 2022
5	Intermediate inspection of research	17 October 2022
6	Deadline research	31 October 2022
7	Invoice	3 November 2022
8	Financial Identification Form (FIF)	4 November 2022
8	Public presentation	To be discussed

