



Francisco Torres

EUROPEAN INTEGRATION THROUGH OPEN-ENDED MECHANISMS

UCP  PRESS

European integration through open-ended mechanisms

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To Annette

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Preface

This is an eloquent analysis of two important channels through which the EU finds itself on a path of further integration. As Professor Torres stresses, this is an open-ended process, i.e. it is evolving in a dynamic way adapting itself to changing circumstances. There are two channels of integration analyzed in this book. One is the EMU and the other the European Green Deal (EGD).

The EMU channel is very well described as an open-ended nature of the integration process. A succession of crises led to gradually strengthen institutions within the monetary union to keep the EMU on a sustainable path that led to ever more integration. The sovereign debt crisis of 2010-12 led to redefining the responsibilities of the ECB. Instead of a central bank whose sole responsibility is to maintain price stability the ECB became an institution responsible for providing liquidity in the government bond markets in times of crisis. The ECB also became the single supervisor of the systemic banks in the union. Elements of a banking union were created. In later crises (the pandemic) fiscal policy instruments were created to stabilize the Eurozone economy. Thus, in response to crises the monetary union evolved into a union that became stronger and better suited to face the next crisis.

The EGD had similar open-ended features although these are less compelling. This probably has to do with the fact that the environmental crises are more distant, i.e. they loom as something that will occur in the future, in contrast with the crises EMU experienced in the recent

past. These had an instant character forcing policymakers to act immediately to avert disaster. In the environmental crises there is always the possibility to come to a decision next time.

The originality of Professor Torres' analysis is to study the links between the integration processes inherent in EMU and in EGD. The author stresses that EMU cannot be successful without EGD. The latter must ensure that growth becomes sustainable. Without this environmental sustainability, the ECB will be unable to maintain price and financial stability. And without price and financial stability, policies aimed at making growth sustainable will be hampered.

Professor Torres is very successful in highlighting these interconnected integration processes. There are other interactions that are worth studying.

We have seen lately that the EGD has been put on the back burner. This has much to do with the fact that the Green Deal inevitably must make fossil sources of energy more expensive. This is done through various forms of taxation. The latter hit lower incomes more than proportionately and lead to strong resistance. As a result, successful environmental policies must be embedded in strong social policies that compensate lower income classes for the loss of purchasing power that inevitably follow from these environmental policies. This reveals a major weakness of the European integration process. The responsibility for social policies has remained mostly vested at the national level. But without these social policies EGD cannot be successful.

Let me reformulate this as follows. Successful nation building includes the creation of social insurance.

A modern nation is equipped with an army and with a social insurance mechanism. I will not dwell into the need of creating an EU-army. The absence of an insurance mechanism at the EU level, however, is problematic. It really puts into jeopardy the whole EGD. There is no way the latter can be successful if it is not embedded into a social union.

Professor Torres stresses the importance of intellectual paradigms in leading to convergence of preferences. I could not agree more. Prior to the 1980s Keynesianism prevailed. Monetary unification was very unpopular among economists, especially American ones. With the monetarist revolution of the 1980s views about monetary union changed. The Monetarist view was that monetary policies only have temporary effects on output and employment. In the long run monetary policies have no effects on these variables. Too intensive use of monetary policies to deal with asymmetric shocks will only trigger more inflation. If all this is true, the loss of a monetary policy instrument at the national level is not great loss. Countries can as well transfer monetary policies to a common central bank. Monetarism led to a convergence of preferences about the desirability of a monetary union and helped to establish the Eurozone. The issue that arises here is whether this convergence of preferences will continue to drive European integration. I observe everywhere increased political polarization, i.e. increasing divergence of preferences about many issues. Also, in the EU there is increasing divergence in preferences about many issues, including about further integration. This creates risks for the future unification process in Europe.

The great benefit of this book is that Professor Torres forces us to think about these issues while keeping faith that in the end the unification process in Europe will continue to be successful.

Paul De Grauwe

John Paulson Chair in European Political Economy at the
London School of Economics and Political Science

Summary and acknowledgments

In this short book I analyse the building of the European Union's (EU) governance framework from the point of view of the sustainability of European integration.

I depart from the premise that the evolution of the EU's governance framework hinges on some degree of preference convergence to have occurred or to occur.

In this context, the book discusses the role of open-ended mechanisms – that is, institutions initially set up incomplete because of insufficient prior convergence of preferences on all aspects of their architecture – therein and considers whether and to what extent those allow for and contribute to preference convergence. Furthermore, it explains how open-ended mechanisms contribute to the sustainability of the economy and society and the European integration process. Note that sustainability is here understood as going beyond environmental sustainability only and as including economic and political sustainability.¹

The book focuses on two fundamental institutions, which were both built as open-ended mechanisms: Economic and Monetary Union (EMU) and the European Green Deal (EGD). Alongside the Single Market, the two can be regarded also as building blocks of the EU's economic model.

1 For the notion of sustainable integration, see Begg *et al.* (2015), Bongardt and Torres (2017b) and Nicolaïdis (2017).

To start with, the book looks at the process of European monetary integration in terms of an open-ended mechanism. It considers how preferences have converged on inflation and the role of monetary policy, allowing for the creation and evolution of the European Monetary System (EMS) and then of European Economic and Monetary Union (EMU).

Drawing on a framework for the analysis of economic and political sustainability of the euro area, the book then addresses what emerges as an important factor in any open-ended mechanism and consequently of EMU's and indeed the EU's sustainability: 'openness' to further political integration. That factor is very much akin to the question of the evolution of national identities versus a European identity and to the notions of EMU as the political core of the European integration project and of the limits of differentiated integration.

Finally, the book presents the European Green Deal as another open-ended mechanism and building block still in the making. It explains how the EGD potentially plugs a gap in the EU governance framework, to the extent that it curbs negative spillovers and promotes synergies, thereby contributing not only to environmental and also economic sustainability but also to EMU's sustainability and to the (political) sustainability of the European integration project.

The book draws on some concepts, which I have employed in previous research to discuss the above-referred issues, notably, epistemic communities, informal institutions, differentiated integration, openness to further European integration and endogeneity in the convergence of preferences. It therefore builds on the

most directly relevant aspects of different (earlier) contributions to the political economy of European integration. This approach allows to better explain the relevance of the broader EU governance framework including the EGD for the specific case of EMU's sustainability while keeping sight of the EU's overall (political) sustainability. It shows how open-ended mechanisms have contributed to the sustainability of the EU and of the very process of European integration. That said, open-ended mechanisms are not sufficient *per se* to ensure the convergence of preferences and therefore the sustainability of the process of European integration over time. The reason is that without 'openness' to further political integration, open-ended mechanisms and/or compromises do not allow for the required convergence of preferences.

This publication is an updated version of my public tenure lecture (lição de agregação) in European Political Economy at the Faculty of Human Sciences of Universidade Católica Portuguesa. The jury, chaired by Professor Isabel Capelo Gil, Rector of UCP, further counted on Professors Paul De Grauwe, London School of Economics and Political Science, Amy Verdun, University of Victoria, José Tavares, Nova School of Business and Economics, Laura Ferreira Pereira, School of Economics, Management and Political Science, University of Minho, António Goucha Soares, Lisbon School of Economics and Management, University of Lisbon, Isabel Horta Correia, Católica Lisbon School of Business and Economics, UCP, and Carlos Morujão, Faculty of Human Sciences, UCP. It was a privilege to discuss my academic CV, the report on a discipline and the lecture before this jury. I would like to thank the two discussants of my lecture, Paul De

Grauwe and José Tavares for very useful comments. Professor Paul De Grauwe has provided a wealth of substantive and challenging comments on these topics both in his discussion of my lesson and on many other occasions ever since 1989, when he edited my paper on Portugal and the EMS (Torres, 1990). I am also most grateful for his preface to this book. While preparing my lecture for publication, Amy Verdun and Annette Bongardt, Faculty of Human Sciences, UCP, kindly provided additional comments. Of course, the responsibility for any mistakes and for the opinions expressed is entirely mine.

1. Introduction

The European Union (EU) finds itself in a permanent crisis mode, as crises appear no longer sequentially and time distant but have come to overlap and reinforce each other and even interact. Adding to that, there is a more unstable and uncertain international context.

The last twenty years alone saw the institutional crisis with the French and Dutch referendums that led to the interruption (and eventually shelving) of the ratification of the Constitutional treaty in 2004, and after that the global financial crisis in 2008, the sovereign debt crisis in 2010, which reached its peak in 2012 but took until mid-2015 with Greece's third bailout, the 2015 refugee crisis with Syrians arriving to the EU, the 2020 Covid-19 pandemic crisis, the 2022 energy and security crisis and the international political and humanitarian crises since 2023, notably the ravaging wars on Ukraine and Gaza.²

At the same time, however, and encompassing all those crises, there is an ever more visible (global) and ecological crisis. It comprises not only climate change but also phenomena such as biodiversity loss and pollution,

2 In the words of an Israeli Oxford historian, Avi Shlaim (2025), the military offensive in Gaza initiated in 2023, the eighth since December 2008, was the most savage, lethal and destructive one, making the enclave uninhabitable and has gone beyond land-grabbing and ethnic cleansing to commit the crime of all crimes – genocide. The moral failure of the EU – not standing up to its values – towards the Palestinian people will impact the process of European integration and the EU's international standing for many years to come.

drastically threatening and already reducing quality of life and economic and social conditions.³ It also impacts the economic and political sustainability of current EU governance and of the process of European integration, by generating external shocks. For illustration, one may think about mass migration, new pandemics, loss of biodiversity, energy inflation, among others.

Note that the UK's exit from the EU (Brexit) is not included in the above list of crises. Brexit (2016-20) may be seen more as a time-consuming exercise than as a crisis although the EU was putting its future at risk by contributing to delaying Brexit and also accommodating successive extensions of Article 50 TEU. Still, according to Laffan (2022), Brexit compelled the EU to put together the capacity to implement it but also obliged it to exercise a form of collective power (of framing, creating collective institutional capacity, establishing collective interests and negotiate). Brexit arguably put an end to what had become an unsustainable situation of differentiated integration, removing one obstacle to EMU's and the EU's sustainability (Bongardt and Torres, 2020a and 2021).

Of course, today's EU is no stranger to crises and to finding solutions. As Jean Monnet famously put it, Europe will be forged in crises and as the sum of the solutions

3 Climate change is a case in point of market failure. Not only is it the largest one (Stern, 2007) but economists have underestimated its true costs, as stressed by Dasgupta (2007: 122-126). As recommended in the Dasgupta review (Dasgupta, 2021), the ecological constraint should be included in production and consumption functions. Otherwise, as pointed out by Schoenmaker (2023), the use of fossil fuels in the linear production and consumption system overstretches the pollution absorption capacity of the Earth system, with irreversible consequences. See also Bongardt and Torres (2024).

adopted for those crises. Yet, it is also true that multiple, major crises affecting the EU at the same time do not only stretch but risk to overwhelm its crisis response capacity. That said, the EU needs to successfully address those crises to deliver results for its citizens and hold the ‘club’ together.

Or, as I put it here, environmental sustainability cannot be seen in isolation but ought to be considered in the context of and interaction with economic and political sustainability. The issue comes down to whether the EU governance framework furthers or can be built as to promote EU sustainability in a broad sense.

Both – a shared identity (to which the EU economic and environmental model is central) and addressing multiple challenges – are fundamental for making the EU more resilient to shocks and European integration sustainable over time. A shared identity and values assume special importance for facilitating collective action and leaps forward in times of crisis. This is especially true in present times when the EU is not standing by its values, consenting in (and in some cases contributing to) the violation of basic human rights, while unable or unwilling to pursue its main objectives, most notably completing the implementation of the European Green Deal, which had already been the priority of the previous European Commission (2019-24). However, the aptitude of the EU’s economic governance framework (of which EMU and the EGD can be regarded as two pillars next to the Single Market) is of central importance to weather multiple crises while staying on course as to deliver EU sustainability in its various dimensions – environmentally, economically and politically.

The beginning of this decade was already marked by two (acute) crises, triggered by the Covid-19 pandemic that erupted in the very beginning of 2020 and the mass-killings and genocide (and ecocide) in Ukraine and Gaza that have taken place since 2022 and 2023, respectively. Both have tested the adequacy of the EU's existing governance framework and led, some initial advances on the energy front notwithstanding, to a stalemate in the process of integration.

1.1 The need to address crises simultaneously in a coherent and holistic way

The pandemic crisis prompted a strong (government policy) response. The European Commission implemented the temporary support for mitigating unemployment risks in an emergency (SURE)⁴ and the NextGenerationEU (NGEU) recovery programme. The NGEU comprises the Recovery and Resilience Facility (RRF) whose financial resources are obtained through the issuing of EU bonds (a novelty and path-breaking).⁵

4 SURE was (May 2020 – December 2022) the emergency operationalisation of a possible European unemployment benefit reinsurance scheme. It provided financial assistance in the form of loans granted on favourable terms from the EU to member states to address sudden increases in public expenditure for the preservation of employment.

5 Already in May 2025, the Council adopted a regulation setting up a new EU financial instrument, the Security Action for Europe (SAFE). It will support member states (and also Ukraine and EEA-EFTA countries) that wish to invest in defence industrial production through common procurement, focusing on priority capabilities. SAFE is the

Moreover, this strong fiscal EU and national (the budgetary rules were suspended) response was already built on what may be considered a third pillar in the making of the EU economic model, the EGD (Bongardt and Torres, 2022; Schoenmaker, 2023; Torres, 2023), and/or a new *raison d'être* for Europe (Tocci, 2022), contributing to the sustainability of the European integration process as such (Torres, 2023; Bongardt and Torres, ongoing 2025). On its part, the European Central Bank (ECB) responded with the Pandemic Emergency Purchasing Programme (PEPP) to the Covid-19 pandemic crisis.

Those developments can be explained by the exogenous nature of the crisis and by policy learning during the previous crises and in their aftermath (Buti and Papaconstantinou, 2021; De Grauwe, 2023, De Grauwe and Ji, 2020; Quaglia and Verdun, 2022; Pagoulatos, 2023). Also, there was a functioning banking sector, which has led to a swifter rebound in economic activity, whereas the combination of the two in turn prevented a new sovereign debt crisis (De Grauwe and Ji, 2020; De Grauwe, 2023). Europe thus came out of the pandemic strengthened; yet, it had barely time to recover from an extraordinary effort and was, as a result, still in a rather fragile condition to respond to the next crisis, caused

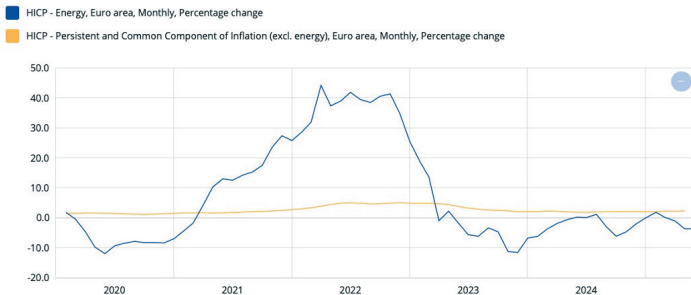
first pillar of the European Commission's ReArm Europe Plan/Readiness 2030, which proposes to leverage over €800 billion in defence spending. The other pillars are: boosting national defence funding by activating the Stability and Growth Pact's national escape clause; making EU instruments such as the cohesion funds more flexible to allow greater defence investment; complementing public funding with contributions from the European Investment Bank; and mobilising private capital.

by the war in Ukraine (Jones, 2022) and the energy and security crisis.

That said, one ought to stress that, it was the successive delays in implementing the green and digital transitions – notably in the energy sector – that spilled over into the monetary sphere. High energy inflation (Figure 1) spilled over, leading to a substantial rise in the Overall Price Index of the Euro area (Figure 2).

In the wake of the energy and security crisis, by the end of 2022, high stagflationary risks had again created major challenges for the good functioning of EMU, that is, in order to avoid financial fragmentation and instability. EMU's sustainability was again cast in doubt. However, this time the destabilising situation was the result of overdue modernisation in the single market realm, made much more acute by the effects of the war in Ukraine.

Figure 1 – Energy inflation: HICP Energy



Source: ECB Data Portal (last update: 10 June 2025, 19:45 CET).

Figure 2 – Inflation: HICP – Overall index, Euro area, Monthly



Source: ECB Data Portal (last update: 10 June 2025, 13:45 CET).

On their part, EU institutions, notably the European Commission and the ECB (less so member states), have played an important role also throughout the energy *cum* security crisis. Examples (in 2022) are the European Commission’s REPowerEU plan, aiming to structurally transform the EU’s energy system, saving energy, diversifying supplies, quickly substituting fossil fuels by accelerating Europe’s clean energy transition, and smartly combine investments and reforms, and the ECB’s Transmission Protection Instrument (TPI), to avoid liquidity crises. In 2022, the ECB had raised interest rates by 250 basis points in less than half a year. It was the fastest increase since 1999. From July 2022 to September 2023, the ECB increased its key interest rates by 450 basis points (the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility have increased to 4.50, 4.75 and 4.00 per

cent, respectively).⁶ In 2024, overall inflation was coming down. Yet, the implication of using monetary instruments is that there is a trade-off between combating (energy-cost induced) inflation and much-needed investment for the green transition.

In fact, there was a need for monetary and fiscal action within the appropriate EU (and also global) governance framework. It included a role for world major central banks in engaging in close coordination of their actions to avoid excessive tightening of monetary policy with avoidable output and employment costs while credibly combatting inflation expectations. But fiscal policy also had a very important role to play, notably in improving the composition of public expenditure to turn around debt dynamics and speeding up the green and digital transitions (Buti *et al.*, 2022).⁷

6 After inflation had peaked at 10.6 percent in October 2022, in September 2023 dropped to 5.2 per cent, reflecting the anchoring of longer-term inflation expectations. In June 2024 inflation halved again to 2.6 per cent and in October the Governing Council considered that the disinflationary process was “well on track”. In June-December 2024 and in January-June 2025, the ECB reduced its key interest rates, the main refinancing operations, the marginal lending facility and the deposit facility, eight times to 2.15, 2.40 and 2 per cent, respectively (more detailed information in table 3).

7 Garicano (2022) had proposed that instead of reforming the Stability and Growth Pact (SGP), the EU should have established a new European Climate Investment Facility, given that, as argued also by Wyplosz (2023), the EU’s current fiscal framework had failed to fully deliver long-term discipline and facilitate a countercyclical fiscal stance. This new facility would provide grants and loans to fight climate change until 2050, when the Union must reach net zero emissions. At the same time, an independent European Fiscal Agency would assess the good standing of member states to access this new

One can hence argue that the succession of crises has made it ever more obvious that EMU's sustainability does not only depend on doing away with its own specific fragilities, which is in any case necessary, but that it is also dependent on the EU's wider governance framework, of which fiscal policy but also the EGD are part.

In today's setting, of not only more frequent but often overlapping and intertwining crises, the EU faces challenges of a new quality. To be effective, policies need to address crises simultaneously in a coherent and holistic way, including in an environmentally sustainable fashion, addressing the ecological crisis, which is mostly caused by unsustainable production and consumption patterns.

Next to EMU, the EGD, too, is an open-ended mechanism. It is the role of the European Green Deal, a third building block in the making, of EU economic governance alongside the Single Market and Economic and Monetary Union (Bongardt and Torres, 2022), to ensure a timely transition towards sustainable production and consumption patterns. Moreover, it is also its role to underpin the sustainability of EMU, which is the EU's economic and political core, and the sustainability of our economy and society and of the process of European integration.

facility. On the importance of a central fiscal capacity, see also Buti and Messori (2023).

2. Economic and Monetary Union: an open-ended compromise and a second building block of EU economic governance

Economic and Monetary Union is still incomplete even today. Its incompleteness is rooted in an incomplete institutional model beyond monetary policy. Such incompleteness has implied persistent institutional fragilities (De Grauwe, 2013, 2022, 2023; Giavazzi and Wyplosz, 2016, De Grauwe and Ji, 2016; Verdun, 2023; Bongardt and Torres, 2024) and allowed for the build-up of financial, fiscal and competitiveness disequilibria (Bongardt and Torres 2016).

EMU's incompleteness derives from the fact that European monetary integration (notably both the creation of the EMS and of EMU) was – or rather could only be – built as an open-ended political compromise (Torres, 2009, 2015). That meant waiting for preferences to converge with respect to: 1) price stability and central bank independence (anchored on Germany) in the case of the EMS; and 2) fiscal rules (also anchored on Germany) and institutionalising policy links between EMU and other policy areas (social, economic, environmental, etc.) to address imbalances (the competitiveness gap) and the possibility of financial fragmentation, which could (and eventually did, in the context of the sovereign debt crisis) put EMU's sustainability at stake.

To see why monetary integration became based on an open-ended compromise, waiting for preferences to eventually converge, let us briefly consider the pre-EMS monetary integration/arrangement attempts: the Werner Report and the 'snake', which both failed due to insufficient preference convergence. The 1970 Werner Report had set out the project of monetary unification in Europe. It involved the creation of an area in which goods, services, people and capital would circulate freely and without competitive distortions and thereby reinforce the European Community's contribution to an economic and monetary equilibrium in the world (Werner Committee, 1970: 9). In the Werner Report, the EEC's main (geopolitical) objective appeared to consist in achieving the political independence of Europe in monetary affairs, at a time when conflicts over the course of monetary policy were already undermining the good functioning of the Bretton Woods system, with the US becoming an increasingly reluctant leader.

At that stage, as far as Germany was concerned, a European monetary union would have to have an independent European central bank, basically modelled on the Bundesbank. This position however was not compatible with the requirements of other countries, especially France, which favoured preserving more active monetary policies. Consequently, the Werner plan for an economic and monetary union did not go ahead.⁸ The Werner plan and the subsequent attempt at exchange rate coordination and stabilisation via the 'snake' (in the so-called snake member states' exchange rates fluctuated

8 Werner Committee (1970). Gros and Thygesen (1998) present a thorough analysis of the failure of the Werner plan.

but did so together) clearly illustrated that the preferences of two different camps (the gradualists, notably Germany and the Netherlands, and the institutionalists, notably France) were too different for a compromise to be possible. Those differences translated into devaluations of the French franc and the Italian lira against the German mark. They led to the failures of the Werner plan and the 'snake' and to frequent realignments during the European Monetary System's first years.

Conversely, the creation of the EMS had introduced some increased flexibility (in the context of re-launching Franco-German cooperation) on the part of both camps. This flexibility boiled down to what one may term the creation of a temporary and open-ended institution. It in turn implied delaying discussions about preferences over the goals of monetary policy.

In fact, the EMS was possible (although with opposition from the Bundesbank), as it provided a way to solve immediate problems: avoiding excessive exchange rate fluctuations and misalignments, the risk of competitive devaluations and an over-valuation of the D-mark, which would serve the competitiveness interests of Germany's industrial base (De Cecco, 1988) and provide the necessary stability to the Common Agriculture Policy (Giavazzi and Giovannini, 1989). At the same time, the door was open for realignments whenever monetary policy goals (preferences) were not compatible.

The EMS began to operate in 1979. During the first years of its life, between 1979 and 1983-4, it was still characterised if not by symmetry then at least by frequent (and quasi-automatic) realignments. The latter would allow for the accommodation of inflation differ-

entials through devaluations of the weaker currencies (their central parities) to compensate for the corresponding loss of competitiveness. From the mid-1980s however, and up until the exchange rate crisis of 1992-3, the EMS essentially became an asymmetric mechanism, a Deutschmark area, with fewer (and smaller) realignments. Those would allow only for the partial accommodation of inflation differentials.⁹ Having started out as a mechanism of exchange rate stability (with many adjustments), the EMS became a disciplinary mechanism. This change in the nature of the EMS, from a symmetrical arrangement to an asymmetric arrangement anchored on the Deutschmark, was possible due to the convergence of preferences of policy makers and politicians from the different participating countries.

Three main factors contributed to that convergence of preferences: 1) two important economic policy changes, one in France (change of government in 1983, replacing a policy of competitive devaluations by a policy of ‘competitive disinflation’ – the “franc fort” policy) and the other one in Italy (in 1984/85, an indexation mechanism, known as the *scala mobile*, was gradually dismantled with a view to breaking the wage-inflation spiral); 2) changes which occurred in international politics, namely the so-called conservative revolution and the consequent establishment of “*supply-side economics*” and monetarist doctrines (notably in the UK, with Margaret Thatcher, and in the US, with Ronald Reagan); and 3) an important

9 As put by Robert Mundell (1994), the Exchange Rate Mechanism (ERM) of the EMS in theory was symmetrical with respect to its member countries, but in practice the Deutschmark became the “inflation anchor” of the system. See also Torres (1987, 2008).

change in economic thinking – the rational expectations revolution.¹⁰

By the late eighties and early nineties, a consensus had been formed. Various informal networks of economists and think tanks but also the various European Community (EC) networks of policy makers, i.e. members of the Monetary Committee, officials from the Directorate-General for Economic and Financial Affairs of the European Commission and other EC institutions, the Committee of Governors of the Central Banks, the Organisation for Economic Co-operation and Development (OECD) and the International Monetary Fund (IMF) as well as (more importantly for preference formation of member states' governments and polities) from national central banks and treasuries, had converged on a general consensus in favour of sound rules to guarantee price stability. Together they constituted a broad epistemic community, sharing the causal belief that the lack of credible institutions was the main cause of inflation.¹¹ The emerging consensus (not followed uniformly across countries or

10 It consisted in the assumption that economic agents were rational (in 1995 Robert Lucas was awarded the Nobel Prize precisely for having developed and applied rational expectations and by having thereby transformed the understanding of economic policy). It also drew attention to the costs in terms of inflation and unemployment of the lack of credibility of policy-makers in relation to economic agents, which led to the award of the Nobel Prize to Finn Kydland and Edward Prescott in 2004, for their analysis of the time inconsistency of economic policy.

11 McNamara (1998) emphasises the ideational convergence to a set of given economic (monetarism) or political (neo-liberalism) beliefs that had reconciled member states' self-interests. As also argued by Moschella (2024b) and Chang (2023), such a convergence or consensus would have led to 'monetary orthodoxy' on the part of most central

institutions or even the academic profession) was in favour of using the EMS as a disciplinary mechanism for high-inflation countries and as a way of enhancing central bank credibility.¹² It moved policy-makers' (and ultimately the politicians' and public) opinion in favour of EMU.

The growing consensus, which drew attention to the costs in terms of inflation and unemployment of the lack of credibility of policy-makers in relation to economic agents (Kydland and Prescott, 1977, Barro and Gordon, 1983, Giavazzi and Pagano, 1986), had already contributed to the stability of the EMS between 1987 and 1992.¹³ There were no realignments, except for a technical adjustment of the lira to a narrow band of fluctuation in 1990. Policy-makers got used to the idea of living in a system of irrevocably fixed exchange rates. Eventually, during that second phase of the transforming EMS, when it became essentially a Deutschmark zone, preferences between the two camps converged significantly. The learning experience provided by an open-ended political compromise on exchange rate stability evolved to an

banks, including the ECB, and to an incapacity to stimulate economic activity without stretching their reputational constraints.

12 Interestingly, Jones and Moschella (2023) argue that the pandemic crisis has led to increasing heterogeneity in economic thinking, notably between German and Italian central bankers. Shifting away from the previous "knowledge consensus" may be contributing to an increase in the politicisation of the euro area monetary policy.

13 Following the policy changes in France (1983) and Italy (1984/85) and the very influential paper by Giavazzi and Pagano (1988) economists in Portugal (Torres, 1990) and Spain (Viñals, 1990) had also joined that consensus. Spain joined the EMS in 1989 and Portugal was to take that step during its first presidency of the EU in 1992, incidentally just before the exchange rate crisis of 1992-3.

externally provided low-inflation *cum* disciplinary commitment technology, together with the commitment to the completion of the internal market by 1992 (full capital market liberalisation). In turn, it made it possible to agree on a blueprint for Economic and Monetary Union, with clearly defined goals to be implemented by a common federal institution.¹⁴

The European polity had set in motion the march to EMU. It was the Delors Report (Delors Committee, 1989) which established the basic constitution of a future monetary union, incidentally very much the image of the German monetary constitution, while avoiding committing to any timetable. Central banks were given a large responsibility and prominence in the Delors Committee, particularly so the Bundesbank, which in turn bound them to the more ambitious goals of European monetary unification. The European polity not only built on the Delors Report. In addition, it imposed on the various committees and the Intergovernmental Conference (IGC), which was drawing up the Maastricht treaty, a very tight timetable to complete all the necessary technical work: The Madrid European Council of July 1989 set the date for Stage I of EMU as of 1 July 1990; the Strasbourg European Council of December 1989, immediately after

14 Most EU countries kept following anti-inflationary monetary policies after the exchange rate crisis of 1992-93 as part of their (motivational) commitments to nominal convergence. According to Macedo *et al.* (2001), the fact that a culture of convergence and (exchange rate) stability-oriented policies (the economic priorities of the envisaged EMU) remained undisputed was due to the existence of what they call the unwritten code of conduct of the Exchange Rate Mechanism in the early 1990s, which allowed its participants to “float in order to fix”.

the fall of the Berlin wall, set the date for the beginning of the IGC before the end of 1990 under the Italian presidency; the Rome European Council of October 1990 set the date for Stage II of EMU as 1 January 1994 and, finally, the Maastricht European Council of December 1991 set 1 January 1999 as the final date associated with the irreversibility in the transition to Stage III.

Yet, the Committee of Governors of the Central Banks limited the financial stability responsibilities of the future common monetary authority while the Monetary Committee limited the scope for policy coordination beyond the monetary area.¹⁵ According to Thygesen (2013), those very limited ECB responsibilities on financial stability reflected the preferences of the central bankers, who were more directly involved in the drafting of the ECB's statutes and wanted to shelter it from any responsibilities other than the objective of price stability, and of European political leaders, who would not like it to become too powerful.¹⁶

15 The Commission report "One Market, one money", Commission of the European Communities (CEC) (1990) and Emerson *et al.* (1992), had suggested a common insurance scheme or regional fiscal autonomy in dealing with asymmetric shocks but the Monetary Committee chose fiscal provisions, such as the entry requirements and the excessive deficit procedure.

16 Thygesen (2013), a member of the Delors Committee in his academic capacity, quotes the paper by Folkerts-Landau and Garber (1992) that raises the question of whether the ECB was meant to be a monetary rule rather than a bank, conceding that the former may have helped towards a smooth start of the monetary authorities in EMU's first decade but that the 2008 financial crisis, and its aftermath, made it a "full-scale central bank". For De Grauwe (2011a; 2011b), throughout the sovereign debt crisis, the ECB has remained too hesitant in or too adamantly opposed to becoming a lender of last resort.

There was a clear division of tasks between, on the one hand, the above-referred two technical committees (the Committee of Governors of Central Banks and the Monetary Committee) and, on the other hand, politicians, who, along with the European Commission, confined themselves to establishing the irreversibility and the extraordinary pace of EMU's implementation.

As had been the case of the EMS, EMU as established in Maastricht was an open-ended political compromise, above all in its economic union part. It also initiated a process of differentiated integration.¹⁷ These two characteristics have affected EMU's sustainability ever since. In contrast with the monetary governance, the broader aspects of economic and political governance in EMU, including budgetary and fiscal coordination and financial supervision, were either not given full consideration or were rejected due to the lack of consensus. Budgetary and fiscal coordination were to be taken on board subsequently with the establishment of the Stability and Growth Pact (SGP) and the Open Method of Coordination (OMC), building gradually on the Broad Economic Policy Guidelines (BEPG).

By 1999, eleven (out of 15) EU countries achieved monetary union. The coins and bills of the new common currency, the euro, were out by 2002. Economic and Monetary Union meant a centralisation of monetary policy,

17 The UK had opted out of the common currency project after currency speculation had forced the pound out of the exchange rate mechanism of the EMS. Danish voters rejected the Treaty of Maastricht and reversed their choice only once Denmark also got an opt out of EMU. The French also had a referendum but (narrowly) voted yes to the EU and EMU.

where a new supranational institution, the ECB, gained responsibility for monetary policy in the euro area.

EMU's set-up meant that its two sides, the monetary side and the economic side, were unbalanced, as a consequence of views not having converged sufficiently (Bongardt and Torres, 2024; and Verdun, 2023). As a result, coordination in the economic union sphere assumed the character of an open compromise, where posterior governance advances were left conditional upon sufficient preference convergence to occur (Torres, 2015). Questions left open primarily concerned how to enforce the convergence/stability (entry) criteria once countries had joined EMU and how to further coordinate budgetary and various other policies to guarantee EMU's sustainability. The fiscal (entry) criteria were complemented in 1997 by the establishment of the SGP regarding the post-entry period.

See table 1 below for a summary of the extent of preference convergence and the establishment of new institutions / policies along the stages of monetary integration.

Table 1 – Evolution of preferences in the process of European monetary (and economic) integration

Stages of monetary integration	Preferences on inflation and the role of monetary policy and characterisation of the stage of monetary (and economic) integration
Werner plan on EMU (1970)	Divergent preferences: prior economic policy harmonisation (gradualists) vs more active monetary policy (institutionalists).

Snake (in and out of the tunnel)	Lack of convergence of preferences and different inflation developments.
EMS Phase I	Open-ended compromise; Different preferences but creation of a temporary open-ended institution (increased flexibility); delaying discussion of goals of monetary policy.
Phase II	Convergence of preferences: the EMS as an anti-inflationary mechanism (Deutschmark zone).
EMS crisis	In-built: impossible trinity (inconsistent quartet) ¹⁸ after the liberalisation of capital controls in 1990; External shock: Global recession and German reunification (as a result of the fall of the Berlin wall) and negative result of the Danish referendum on the Maastricht Treaty.
EMU	Open-ended compromise; harmonised preferences on inflation and on the role of monetary policies but lack of enforcement and corrective mechanisms for fiscal and competitiveness imbalances. Divergent preferences on whether and how other economic policies should be coordinated. The fiscal (entry) criteria were complemented in 1997 by the establishment of the Stability and Growth Pact in regard to the post-entry period. Economic reform attempts took place under the heading of the Lisbon Strategy (2000-10) and then the Europe 2020 Strategy (2011-2020).

18 With full capital mobility, markets could easily test the commitment of each EMS member regarding their degree of adherence to the German tight monetary stance. Therefore, fixed exchange rates (even if adjustable through realignments, as was the case in the EMS) and the commitment to the Internal Market objective of liberalising all capital movements implied the end of any monetary policy autonomy for the 'followers' of Germany. The only chance to hold on to any monetary sovereignty was to share it in a common institution such as a European central bank.

2.1 The first test to EMU's sustainability: the sovereign debt crisis

In the EU, monetary policy is conducted for the Euro area ('one size fits all'). By nature, it envisages an average member country that does not exist (thereby risking making no country happy, the policy being deemed too tight for some, too loose for others).¹⁹ There are spillovers from EMU's (centralised) monetary side into its economic sphere (decentralised, albeit depicting increasing coordination efforts). However, there are also spillovers from its economic sphere into its monetary sphere (Torres, 2013). The latter came to the fore in the sovereign debt crisis. See table 2 below for a summary of the spillover effects and policy responses.

19 According to Tavares (2023), the ECB's monetary policy while conducted at the central level appropriately weighs its impact on different national jurisdictions. Pereira and Tavares (2019), conclude that larger units tend to be weighed more heavily, but less so than their economic or population weight would suggest.

**Table 2 – Policy responses to EMU spillover effects
across policy areas**

Direction of spillover	From the monetary side to the economic side of the EMU through ‘one-size-fits-all monetary policy’	From the (incomplete) economic side of EMU to its monetary side through insufficient (fiscal and economic) policy coordination and reforms to prevent major macro imbalances
Responses by monetary and fiscal (and economic, social, environmental) authorities	<p>Pressure by some national governments on the ECB to soften its stance by lowering interest rates.</p> <p>Pressure by some member states on the ECB to act as lender of last resort.</p> <p>Non-compliance with the rules of the SGP and disregard for the need to control possible effects of a common interest rate (on bubbles and increasing unit labour costs), as the ECB did not use monetary policy (minimum reserve requirements, De Grauwe, 2022), to limit bank credit.</p> <p>Provision of energy price subsidies to counteract energy inflation.</p>	<p>Pressure by the ECB on national governments to correct fiscal and macroeconomic imbalances and (also on the Commission, EU Council and European Council, through a strategic collaboration with the European Parliament) to enact institutional reform (increased surveillance, automatic sanctions and clear division of responsibilities on rescue mechanisms).</p> <p>Attempts by member states to coordinate economic and social and labour policies (Lisbon and Europe 2020 Strategies) and to strengthen the EU’s role in other areas (social, environmental).</p> <p>Enhanced economic governance: six-pack, Euro plus Pact; Treaty on Stability, Coordination and Governance in the Economic and Monetary Union; building on SGP and Europe 2020 Strategy and European Semester; EGD.</p> <p>ECB ‘non-conventional’ measures and ‘Greening’ of monetary policy.</p> <p>ECB urging governments to cut counterproductive fossil fuel price subsidies.</p>

EMU's incompleteness in the economic union part had left its (financial, fiscal and economic) governance institutions unable to encompass increasing policy interdependence, let alone capable of dealing with the cumulative effects of the financial and sovereign debt crises. EMU institutions, already affected by the 2008 global financial crisis, were unable to deal with the sovereign debt crisis that began in 2010, as there were neither financial backstops for stressed sovereigns or strained banks nor for countering sudden stops in financial flows (Mongelli *et al.*, 2016).²⁰

Although the EU had moved towards increased coordinated financial supervision in response to the global financial crisis it proved insufficient. Also, results of the Lisbon economic reform agenda were mixed at best. The subsequent sovereign debt crisis became a Euro-area crisis. The large negative spillovers, originating in the economic part of the union where there had been insufficient financial, fiscal and economic policy coordination and domestic adjustments to prevent macroeconomic instability and imbalances, affected the monetary side (Torres, 2015). The negative spillovers from the economic side of EMU came to put at risk the survival of the monetary union. The sovereign debt crisis thereby added urgency to solving EMU's fragilities and to completing its economic union side.

Paul De Grauwe (2011; 2013; 2023) provides the most compelling explanation of why EMU is a fragile construction: euro area governments issue bonds in euros that they cannot control, as if those bonds were in a foreign

20 The Maastricht Treaty had no common provisions to deal with a banking crisis or with a sovereign debt crisis.

currency. That means that euro area governments are not in a position to guarantee that they are able to pay the bonds at maturity.

As De Grauwe (2023: 180) puts it: “The risk that governments can run out of cash in a monetary union creates the potential for self-fulfilling liquidity crises: investors who are afraid that the government may run out of cash, panic and massively sell that government’s bonds, thereby precipitating the liquidity crisis they were afraid of. Such a crisis may force the government to default on its debt”.

The fact that there is no lender of last resort is an inherent element of instability in a monetary union like EMU.

In the sovereign debt crisis, EMU’s in-built fragilities put its very sustainability and survival at stake. The situation only changed with the President of the ECB’s famous ‘whatever it takes’ statement, a credible unconditional commitment to defending the euro against speculation, and the decision to create a banking union.²¹ Speculative attacks ceased and the crisis led to some incremental institution-building. Only in the aftermath of the crisis, economists arrived at a relative consensus on EMU’s

21 See De Grauwe (2013 and 2023). For Corsetti *et al.* (2019) – who contrast the downturn after 2009 with the 1992-3 crisis in the EMS – the explanation lies in the absence of credible and timely policies to backstop financial intermediaries and sovereign debt and to thereby prevent problems in banks and bond markets from feeding on one another. During the EMS crisis, it had been national central banks and treasuries that provided that backstop.

institutional fragilities and also on the causes of the crisis (see Baldwin *et al.*, 2015).²²

Institutional building has continued beyond the sovereign debt crisis, also in the pandemic and energy crisis. Table 3 below provides a detailed overview of EMU's fragilities and the occurred incremental EU governance building in the context of various crises, including the pandemic and energy crisis.

Table 3 – The crises: institutional fragilities and incremental changes

Crises	Institutional fragilities and incremental changes
EMU crisis	One-size-fits-all monetary policy without mechanisms to enforce fiscal sustainability (binding recommendations by the European Commission could be disregarded without sanctions) and address financial regulation and competitiveness imbalances; lack of national reforms in some member states and incapacity of financial markets to distinguish between EMU sovereigns; incomplete Internal Market; lack of a willing lender of last resort to counter liquidity crises and contagion (De Grauwe, 2011, 2013, 2023); External shock: 2008 global financial crisis followed by 2010/11 sovereign debt crisis.

22 There was a consensus narrative – see <https://voxeu.org/article/ez-crisis-consensus-narrative>. Academics had called attention for EMU's incompleteness from the very beginning (already before its inception) – see for instance Giavazzi and Wyplosz (2016) and Bongardt and Torres (2017b; 2024) for a summary of that debate and the economists' consensus. See also Chang *et al.* (2020) for a political economy analysis of the sovereign debt crisis and of the following adjustment programmes throughout and beyond the sovereign debt crisis.

<p>Completing EMU as a response to the crises: Economic Union? Renewed debate on political integration ...</p>	<p>Need for continuous institutional incremental changes to respond to the challenges brought about by the (global financial and the sovereign debt) crises: Creation of a quasi European monetary fund, after the European Financial Stability Facility (EFSF) was allowed through an amendment of its framework to grant pre-emptive lines of credit to countries under pressure on the financial markets and to assist in the recapitalisation of stricken banks. Establishment of the European Stability Mechanism (ESM). New mechanisms of economic governance and stronger fiscal (reinforcement of the SGP) and macroeconomic surveillance mechanisms along common lines. Increasingly coordinated financial supervision. New role for the ECB ('non-standard' measures and strategic behaviour) (Torres, 2013). Securities Market Programme (SMP) in 2010; the successful announcement of the Outright Monetary Transactions (OMT) programme in 2012 (which was never implemented); and Public Sector Purchase Programme (PSPP) in 2015, with potentially unlimited purchasing of government bonds in the secondary market.</p>
<p>Pandemic crisis</p>	<p>More ECB 'non-standard' measures (asset purchase programme, APP, expanded; Pandemic Emergency Purchasing Programme launched). Escape clause to SGP; EIB loan guarantee scheme; SURE; ESM credit line; NGEU fund and RRF. New own resources and common bond issuing.</p>
<p>Energy and security crisis and risk of stagflation</p>	<p>European Commission RePowerEU programme and ECB Transmission Protection Instrument (TPI) in 2022, providing liquidity to high-risk countries to 'ensure that the monetary policy stance is transmitted smoothly across all euro area countries' (purchases not to be restricted <i>ex ante</i>). Unlike OMT, the TPI is not conditional on ESM programmes and may be asymmetric. Traditional central bank dilemma (inflation vs. unemployment) and specific ECB dilemma (inflation vs. financial stability; De Grauwe, 2022a, 2022b and 2023).</p>

	<p>From July 2022 to September 2023, the ECB increased its key interest rates by 450 basis points (the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility have increased to 4.50, 4.75 and 4.00 per cent, respectively). As of the beginning of March 2023, APP portfolio was declining at a measured and predictable pace, as the Eurosystem would not reinvest the principal payments from maturing securities. The ECB continued however to reinvest the principal payments from maturing securities purchased under the PEPP until at least the end of 2024 and to apply flexibility in reinvesting redemptions coming due in the PEPP portfolio to counter risks to the monetary policy transmission mechanism related to the pandemic.</p>
	<p>In 2024 the ECB considered that the disinflationary process was “well on track” and cut interest rate four times: in June, September, October and December 2024, the ECB has lowered the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility to 3.15, 3.40 and 3 per cent, respectively. In January, March, April and June 2025, the ECB reduced those three key interest rates four times by 25 basis points, to 2.15, 2.40 and 2 per cent, respectively.</p>
	<p>Since the end of 2024, the APP and PEPP portfolios have been declining at a measured and predictable pace. Reinvestments under the APP and the PEPP were fully discontinued in July 2023 and December 2024, respectively.</p>
	<p>At the same time, the TPI has remained available to counter unwarranted, disorderly market dynamics that pose a serious threat to the transmission of monetary policy across all euro area countries.</p>

2.2 The ECB also as a guardian of the sustainability of EMU as such

As laid out in the previous sections, the fact that the ECB had been placed in a setting in which EMU's economic side was left incomplete at Maastricht came, with the sovereign debt crisis, to negatively affect monetary policy and the very sustainability of EMU. There are two main reasons for that. On the one hand, because monetary policy has to face up to member state governments with independent and often uncoordinated if not contradictory economic policies. On the other hand, because spillovers from the financial, fiscal and economic areas of the union (most recently the energy sector whose modernisation, independence and sustainability have been hindered by vested interests in the coal, gas, oil and nuclear industry together with national governments) into its monetary side, put at stake EMU's stability. As a result of operating in an incomplete EMU, created as an open-ended mechanism, the ECB cannot take its independence for granted.

To guarantee its independence, the ECB needs to be perceived as a legitimate institution. The ECB derives its legitimacy not only from delivering price stability and, without prejudice to that primary objective, from supporting the general economic policies in the Union (art. 127 of the TFEU) but also from acting as a guardian of EMU objectives, doing "whatever it takes to preserve the euro". It aims at guaranteeing what may be termed its foremost objective: the sustainability of EMU as such (Torres, 2013). This implicit objective, seldom addressed in the literature on EMU's legitimacy, leads the Bank to

behave strategically and engage in exceptional measures and in wider economic policy debates, for instance pushing for “a gradual and structured effort to complete EMU” (Draghi, 2012).

The monetary dialogue between the EP and the ECB contributes to enhancing the responsiveness of decision-making in supranational regulation (monetary policy) and thus the monetary authorities’ legitimacy. It also helps to improve efficiency (allowing for the internalisation at the euro area level of different externalities) and, at the same time, the quality of democracy in European governance (Torres, 2013, 2015). It made possible increased participation in and deliberation on the discussions about the conduct of monetary policy in the euro area and in this way contributed to enhance the ECB’s transparency. Those discussions have involved monetary policy experts and economists with different perspectives as well as national parliaments.²³

The ECB is therefore engaged in the process of completing the economic side of EMU that was left incomplete at Maastricht and, which, with the sovereign debt crisis, came to negatively affect its legitimacy and independence.

23 The ECB is in general perceived as less accountable to the European Parliament (the monetary dialogue) than the Fed is to Congress (congressional hearings). Interestingly, a recent study by Akbik and Diessner (2024), examining how members of Parliament or Congress challenged the respective central banks’ decisions during the crises and how the latter engaged with that contestation, concludes that the ECB is actually held to a higher standard of accountability than the Fed.

2.3 Looking beyond the immediate crisis context: the issue of sustainability (in sensu latu)

A crisis calls for an exit strategy. In the sovereign debt crisis, structural reforms both at the EU and at the national level had been seen as a pre-condition for a credible crisis exit strategy and a durable recovery, with a view to higher potential growth (Draghi 2015 and 2016) and therefore for dealing with legacy costs and for a successful crisis exit.

However, growth has to be sustainable not only economically (which also implies less dependency on non-reliable sources/suppliers) but also environmentally (that is, environmental damages and resource depletion and long-term, inter-generational effects have to be internalised).²⁴ Even on purely economic grounds, economic growth will not be sustainable – and any recovery not durable – unless environmental damages and resource depletion and long-term, inter-generational effects are internalized; nor would it be politically sustainable. Any general call for growth (‘whatever kind of growth’) ignores the economic case for environmental protection, let alone the EU’s commitment to a model of development with quality, sustainable growth, and a

24 See Schoenmaker (2023) for a discussion of how the current linear production and consumption system (meaning the extraction of raw materials, followed by processing into goods, their consumption and disposal/waste) that assumes unlimited and cheap natural resources risks crossing planetary boundaries. Those natural resources are no longer unlimited and cheap – non-renewables are increasingly under pressure while potentially renewables are declining in extent and regenerative capacity. In addition, the use of fossil fuels overburdens the Earth system as a natural sink.

moral obligation (towards the less well-off and future generations) of dealing with climate change.²⁵

This is valid for all crises, including the more recent pandemic crisis and energy and security crisis, as it adds to the wider benefits from EU integration. As Begg *et al.* (2015) and Bongardt and Torres (2017b) argue, EMU can be sustained both in a more immediate crisis context and in the long run as part of a politically sustainable integration project, which envisages high-quality growth and respects longer-term budgetary challenges.

This is why, in trying to explain ‘the building of the EU’s governance framework through open-ended mechanisms’, I bring in the EGD as one of its building blocks (alongside with the Single Market and EMU). Both EMU and the EGD build on the first pillar of the EU’s economic model, the Single Market. Moreover, EMU needs the EGD and vice versa in order to assure the sustainability of the EU integration process. The reason is twofold: on the one hand, without the EGD, as part of the EU regulatory framework, EMU’s (wider output) legitimacy is weakened and spillovers from its economic side (say, from the energy sector) complicate the task of central banks, negatively affecting its sustainability; on the other hand, without EMU as the economic and political core of EU

25 Sustainable development has been an objective of the EU for about three decades (the concept goes back to the so-called Brundtland report, 1987). The 2009 Lisbon Treaty goes further, committing the EU to a high level of protection and improvement of the quality of the environment in the management of the single market (Art.3 (3) TEU). As for the moral obligation to deal with climate change, see the Brundtland Report (1987), the encyclical letter on the environment by Pope Francis (2015), Stern (2015), Thunberg *et al.* (2020) and Dasgupta (2021).

integration (or with too much differentiated integration), the EGD is much weakened in response to crises (think of the response to the pandemic crisis, which was conducted through the euro area framework, without the ECB's intervention) and its implementation is more difficult outside the EU's (more cohesive) economic and political core.

3. The European Green Deal: another open-ended compromise and a third building block in the making of EU economic governance

By committing the EU to a change in policy direction towards more sustainability, the European Green Deal envisaged another qualitative change in European integration.

Previously, the single market and EMU, also Commission initiatives, had already shifted a trade-led to a European regulatory model and added a monetary union to the (still incomplete) economic union side. Doing so, both the single market and EMU enhanced economic sustainability, promoting efficiency through the competitiveness rationale in the single market and the benefits of a single currency.²⁶ The EGD further enhanced these goals, by bringing in environmental sustainability and making climate neutrality the top priority and by including sustainability in the competitiveness rationale (now referred as ‘competitive sustainability’). The chief rationale for EU-level coordination, as the European Commission (2019) and the ECB (2021a; 2021b) acknowledged, lies in avoiding negative spillovers from non-internalised environmental degradation into the single market and EMU.

26 They also put the Union on a higher economic integration stage on the Balassa scale (Balassa, 1961). The EGD consolidates that move by encompassing economic policy coordination efforts in a more structured and coherent way, through a sustainability lens.

Box 1: The European Green Deal

The objectives of the European Green Deal are to achieve net zero emissions of greenhouse gases for the EU as a whole by 2050, decoupling economic growth from resource use and transforming the EU into a fair and prosperous society, with a modern and resource-efficient and competitive economy (European Commission, 2019b). It requires above all cutting emissions, investing in green technologies and protecting the natural environment.

It was the recognition of climate change as the biggest medium to long-term challenge facing the EU that paved the way for limiting global warming as the priority objective. In its Assessment Report on climate science, the United Nation's International Panel on Climate Change (IPCC, 2023) highlights the scale of the global challenge and urgency of addressing climate change.

Reaching carbon-neutrality presupposes deeply transformative policies and environmentally sustainable growth. The EGD enshrines a set of policy initiatives that span a wide range of policy areas: clean energy, sustainable industry, building and renovation, farm to fork (sustainable food system), eliminating pollution, sustainable mobility and biodiversity. The EGD is an integral part of the plan to implement the United Nations 2030 Agenda and its sustainable development goals (SDGs). It features an action plan for implementation, a climate law to turn political carbon neutrality commitments into a legal obligation, and a just transition mechanism to smooth

the transition in the most affected regions. The EGD bases necessity for change on scientific evidence on multi-faceted environmental damage and challenges (among others, climate change, loss of biodiversity, ozone depletion, water pollution, waste pollution, and urban stress). It stresses inter-generational justice (in the interest of the young generation) and economic opportunity (a sustainable growth strategy).

From its inception, there were two principal reasons why the EGD had the potential to become another building block of EU economic governance. First, it is built on EU sustainability thinking that had been evolving over time and represents its (logical) culmination, as economic efficiency reasoning requires that environmental effects be accounted for, too.²⁷ It also gives consistency to what had been a piecemeal approach (Bongardt and Torres, 2013). Second, the EU could only ever hope for truly politically sustainable European integration if it put economics at the service of the EU integration project by adopting a wider sustainability perspective, also in addressing its governance fragilities (Begg *et al.*, 2015; Bongardt and Torres, 2017b; Nicolaidis 2017; Bongardt and Torres, 2022; Schoenmaker, 2023; Tocci, 2022; Torres, 2023). The EGD claimed to provide such a sustainability lens (European Commission, 2019a).

²⁷ Note that this calls for internalising negative external effects from productive activity like pollution. If negative externalities are not priced in, there is a difference between private cost (market price) and social (opportunity) cost, which leads to excess consumption and production (an economic inefficiency).

The EGD is an expression of the EU's comparative advantage: long-term thinking.²⁸ In fact, its objectives follow up on the previous European economic agendas (Lisbon and Europe 2020 strategies, both forward-looking and with long-term horizons), in that the European economy and society are to become sustainable by transforming potential threats (climate and environmental challenges) into economic opportunities (sustainable growth) and by making the transition just and inclusive.²⁹ As illustrated in figure 3, the EGD's objective to achieve net zero emissions of greenhouse gases for the EU as a whole by 2050 is strongly supported (81 per cent) by European citizens.

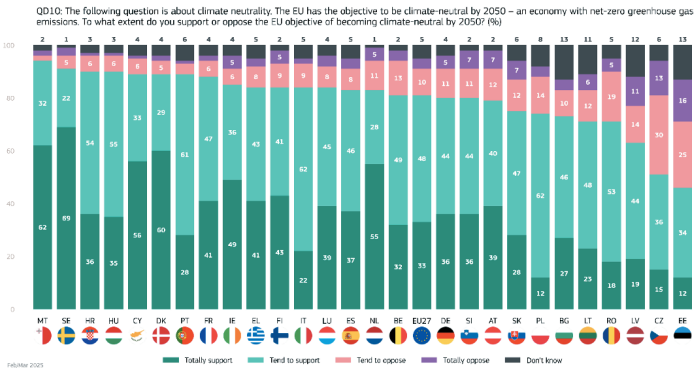
What is new, and a paradigm change, is that the EGD introduces an overarching sustainability lens to all policies and on the economy and society, namely climate neutrality. Like the single market and EMU, the EGD, too, constitutes a change of paradigm. The challenge that remains is to bridge long-term goals with consistent policies and actions in the shorter term with a view to climate and environmental mainstreaming. It is made even more difficult given that, despite its ambitious objectives, the EGD did not come with (a claim for) new competences for the Union and even less with treaty changes, unlike what had been the case of the single market and EMU. Rather, the EGD draws on the existing EU eco-

28 For Nicolaïdis (2017), long-term thinking is the silver lining of the EU's democratic deficit, given that the Union is less subject to electoral pressures.

29 For a comprehensive analysis of Lisbon and Europe 2020 strategies see Bongardt and Torres (2020c). Europe 2020 headline indicators are available at Eurostat.

conomic governance framework for implementation, most notably climate and energy policies. It is therefore also (as in the cases of the EMS and of EMU, in its economic side) an open-ended mechanism dependent upon preference convergence.

Figure 3 – Support for the EU objective of climate neutrality by 2050



Source: Special Eurobarometer 565, Climate Change (field work: Feb./ /March 2025).

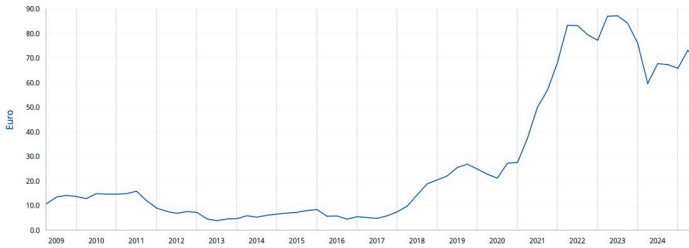
The EGD has to draw on a multitude of policies and instruments that had previously lacked coherence and a holistic approach. There had been some important developments, among which that environment policy and instruments had been brought ever more under an efficiency rationale as the Internal Market Programme and the EU’s global climate leadership role. The latter has

fed back into internal policies and member state targets. With the launch in 2005 of the European Emissions Trading System (ETS), an EU-level cap-and-trade instrument, polluters were required to pay for their greenhouse gas emissions. The ETS covers emissions from the electricity and heat generation, industrial manufacturing and aviation sectors, accounting for roughly 40 per cent of total emissions in the EU (it started covering emissions from maritime transport in 2024).

The ETS is a market-based instrument with efficiency properties. Its good functioning hinges on an adequate carbon price and a competitive market setting. Subject to a cap on total emissions, the carbon price reflects relative scarcity (supply and demand). Carbon trading provides economic agents with an incentive to abate emissions and invest in more environmentally efficient equipment. The ETS became broader and more effective in its 4th phase (2021-2030), as part of the Fit-for-55 package (European Commission, 2021).³⁰ Figure 4, below, shows the evolution of EU carbon price allowances – prices before 2021 were too low for the ETS to be effective.

30 In December 2022, EU legislators reached agreement to equalise the price of carbon paid for EU products operating under the ETS and the one for imported goods. The Carbon Border Adjustment Mechanism (CBAM), the world's first carbon tariff, became operational in autumn 2023 (first phase).

Figure 4 – Capital markets-Carbon price-EU allowance per metric ton – Spring/June 2025, Euro area, Quarterly)



Source: ECB Data Portal (last update:10 June 2025, 19:52 CET).

The fact that climate and sustainability having been promoted to the overarching rationale under the EGD implies that all other policies need to be coordinated and legislation revised to fall in line with a holistic sustainability objective and carbon emission targets. Climate policy (hard law) together with climate mainstreaming may create a constraint that helps to align other policy areas. International commitments, above all the 2015 Paris Climate Accord, add (self-imposed and voluntary) external constraints.

Since coming into existence, the EGD has already brought about several important changes.

First, the Commission came to enshrine and adopt a wide (economic, social, environmental) sustainability lens already in the Annual Sustainable Growth Strategy 2020 (previously denominated Annual Growth Strategy). It emphasizes the multi-faceted role that environmental policies can play in regard to a sustainable economic

recovery and employment growth, through resource efficiency and the circular economy but also others like environmental fiscal reform, including shifting the tax burden from labour (a good) onto environmental pollution (an inefficiency).

Second, and although the EGD had drawn on – essentially unchanged – soft governance through the European Semester process, the climate law and climate and energy regulation work as constraints.

Third, the EGD gained the financial component that it had initially lacked. The EU's response to the pandemic crisis gave rise to (substantial) funds earmarked for fostering the green transition while it simultaneously hardened soft governance by introducing reform conditionality; In addition, the Recovery Fund, set up as a temporary institution, will be repaid through new EU own resources. That EU fiscal capacity, together with other ongoing dynamics in favour of sustainability at the EU level (monetary, financial, energy and trade policies, attempts at Common Agriculture Policy reform) and also the national and local levels, not only allow the EU to reinforce its environmental policy but also contribute to an advance in economic and political integration.

Finally, the EGD has the potential to contribute beyond environmental sustainability also to the sustainability of the European integration process as such. To the extent that it curbs negative spillovers and promotes synergies, the EGD feeds back into and complements the qualitative changes that the single market and EMU made to EU

economic governance and contributes also to economic and political sustainability.³¹

As stated above, those developments make the EGD a third building block in the making of a sustainable European economic model (Bongardt and Torres, 2022; Schoenmaker, 2023; Torres, 2023) and/or a new *raison d'être* for Europe (Tocci, 2022), contributing to the sustainability of the European integration process as such (Torres, 2023; Bongardt and Torres, ongoing 2025). Moreover, this third building block of EU economic governance has also the potential to foster democratic participation (Nicolaidis, 2023) and is part of what Loukas Tsoukalis (2022) refers to as Europe's coming of age.

31 Note that in the EGD the notion of a just transition is seen as a precondition to achieve a broad social consensus on the green transition and to ensure a successful implementation of the EGD project (Sabato and Fronteddu, 2020). While the EGD was thin on social aspects, the Commission (2021) proposed a new Social Climate Fund (SCF) as part of its package to implement the EU's new 2030 climate target. The new separate ETS2, as of 2027, will cover Member States sectors under Effort Sharing Regulation and will allocate 25 per cent of revenues to the SCF. National social climate plans were to be submitted by summer 2025.

4. How have the two more recent crises played to preference convergence and to EMU's and the EU's sustainability?

Crises in the EU prior to the Covid-19 pandemic deflected from the climate issue, pushing more short-term issues to the fore.

In the 2008-09 financial and the 2010-12/15 sovereign debt crises, sustainability and green growth had already been objectives of the EU's economic agendas. Nevertheless, the EU largely wasted the opportunity for a green crisis exit although that would have been feasible financial restraints notwithstanding, through existing instruments (regulation), with a view to incentivising sustainable behaviour and investment (Begg *et al.*, 2015; Bongardt and Torres, 2016).

In 2020 the pandemic crisis caught the EU at a time when the EGD's long-term sustainability and climate neutrality objectives had only just been launched. The issue was whether the Union would address the crisis through the EGD framework, as one would expect if the EGD was a building block of EU economic governance. In fact, the crisis quickly presented the Union with the need to deal with the pandemic's economic and social fall-out, which the EU treated as an emergency (unlike the climate).³²

³² The climate crisis did not receive the same treatment, regardless of the scientific evidence and need for urgent action (WMO, 2020;

In addition, prior to and in the initial stages of the pandemic crisis, the EGD's contribution to addressing unresolved EU governance fragilities (notably EMU's incompleteness) was limited. When the EU responded to the pandemic crisis, it initially viewed it foremost as a public health crisis, in a second stage also as an economic crisis. The latter was perceived as posing a particular challenge for EMU. Addressing the pandemic crisis might have been more difficult had Brexit not already occurred at that time. It was possible to act on the lessons learnt during the sovereign debt crisis, intervening earlier and forcefully at the EU level.³³ The immediate response to the economic impact of the crisis was largely built on and developed within the governance structure of the euro area, through institutions put in place or envisaged at the time of the sovereign debt crisis: the European Stability Mechanism (access to finance costs of the pandemic), ECB measures (the PEPP), budgetary rules (activating the SGP's general escape clause) and SURE.

EMU is a case in point of participation in common institutions. In line with what one would expect, there is evidence that those member states that are part of the euro area tend to support it ever more, even despite the crisis impacts, while the countries that stayed out of the

IMF, 2020). The IMF (2020) warned against a rapidly closing window for halting temperature increases at safe levels, urging a shift to a sustainable and fair growth path through a combination of carbon pricing and an initial green stimulus.

33 See Buti and Papaconstantinou (2021), De Grauwe (2023), Ladi and Tsarouhas (2020), Quaglia and Verdun (2022), Torres (2023), Vanhercke and Verdun (2022), Verdun (2023).

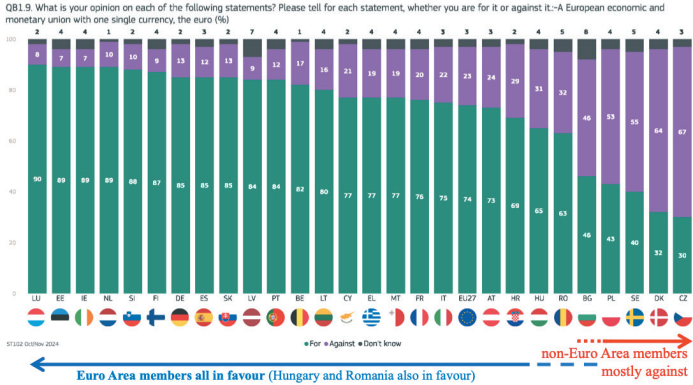
euro area tend not to support it. This is shown in figure 4, below.³⁴

In other words, there is a certain endogeneity in the convergence of preferences or, as put by Dustmann *et al.* (2017) in the context of Brexit, it is the very differentiation that tends to explain the separation. Preferences tend to converge among member states whenever they have the opportunity to cooperate through institutions and common policies and to diverge in the case they do not form part of (main common) institutions and cooperate less with one another.

The most effective way for the EU to address the economic consequences of the pandemic crisis was therefore through its euro area framework (Bongardt and Torres, 2020a). That fact came to highlight the importance of the issue (and the limits) of differentiated integration (see box 2 below).

34 Standard Eurobarometer 102, European Commission, Autumn 2024 (Fieldwork: October 2024). As for the Euro area countries, support for EMU and the Euro stood at 81 per cent on average, with a variation between 90 and 69 per cent, with only 16 per cent against – highest support ever for the common currency, both in the Euro area (81 per cent) and the EU (74 per cent). As for non-euro area countries' public opinions, two of them were in favour of EMU and the Euro but support was below the EU average: Hungary and Romania. The survey did not include the UK, which left the EU in 2020 (in 2019, only 25 per cent had supported EMU in the UK).

Figure 5 – Support for EMU (*paris cum paribus facillime congregantur*)



Source: Standard Eurobarometer 102, First results, p. 26, Autumn 2024 (Fieldwork: 10 October May-5 November 2024).

Box 2: The importance of a core project for preference convergence and the limits of differentiated integration

To function, the Union also needs a political core and a shared identity and destiny. It follows that differentiated integration cannot work with opt-outs on core EU institutions like EMU – the euro area has in the meantime established itself as the core circle of European integration – and without openness to further integration. With divergent interests across member states, too much differentiation through opt-outs and reinforced cooperation can erode the

cohesiveness of the EU project. A shared identity is thus crucial but difficult to achieve in the absence of a core project. Therefore, variable geometry ought to imply “variably geometry Europe” (as opposed to EU), as variable geometry or differentiated integration in the European Union has reached its limits (Bongardt and Torres, 2021).

The predominant vision in the 1990s was that the single market of the EU with the four freedoms, plus some policies that would make those politically viable (already including the coordination of economic policies) would be the common base, while other forms of open cooperation would allow for the necessary flexibility in light of the larger heterogeneity of the club (Dewatripont *et al.*, 1995; Demetris *et al.*, 2018, have a similar approach).

However, EMU, the EU’s treaty-based integration objective since the Maastricht treaty, has in the meantime become the (economic and political) core of the Union and of the integration process. It is therefore the euro area, and no longer the internal market, on which one would have to anchor EU integration. Therefore, from the perspective of the EU’s optimum size and/or sustainability as an integration project, member states should either be part of all main EU (treaty-based) institutions, most notably EMU and Schengen, or leave the Union and opt, according to their preferences, for membership of the European Economic Area (EEA) only, like Norway, for a customs union with the EU, like Turkey, for a lesser preferential trade agreement or simply for trading under World Trade Organisation (WTO) rules.

Participation in common institutions and sovereignty-sharing tend to create and strengthen a European identity beyond the various national identities, whereby the problem of heterogeneous preferences and cultural diversity between the member states can be overcome (Alesina, Tabellini and Trebbi, 2017:4; Bongardt and Torres, 2017b and 2021). To allow for a convergence of preferences, ‘openness’ to European integration – that is, openness to participate in the main EU initiatives and institutions and to share a common destiny – is however a necessary condition (Bongardt and Torres, 2021).

Endogeneity may partly explain the (relative) success of open-ended mechanisms such as the EMS, EMU or the EGD. It may be limited by differentiated integration.

On the other hand, the pandemic crisis played to the EGD’s economic rationale and policy priorities. The pandemic has thereby worked towards reinforcing the EGD. Policy responses may build on policy linkages, such as synergies between addressing climate change and Covid-19 (causes, policies) and also complementarities (digital transition). Environmental and social lessons have, in an initial phase, contributed to preparedness to change unsustainable patterns of consumption and production in line with the EGD and long-standing EU priorities (digital, fair and sustainable economy).

Hence, the Covid-19 crisis provided the missing link between the EGD’s long-term objectives and conducive short-term policies (Bongardt and Torres, 2022). The

pandemic crisis was an acute crisis within a larger environment and climate crisis context. Both public health and the environment have public good characteristics, with potentially large and longer-term benefits that are not internalised. In the pandemic crisis, decision-makers acted on science-based policy advice to an extent that has not happened in the climate crisis (Bongardt and Torres, 2020b). The crisis context opened the opportunity to correct market failures (climate change being the largest) and promote the shift to sustainable production and consumption patterns that would benefit public health but also the environment/climate and consolidate a sustainable model of development.

The European Commission, which partly regained the leadership lost to the European Council during the global financial and sovereign debt crises, saw that the EGD could be framed as an exit strategy for the pandemic crisis.³⁵ The EU's efforts to ensure a future-oriented sustainable, even, inclusive and fair recovery were therefore centred on the EGD (termed the EU's recovery strategy) and on investment. In addition, the EU's response to the pandemic also supplied resources – in fact, the EU's

35 The European Commission manifested entrepreneurial spirit, interrupting the 'successively shifting from policy entrepreneurship to policy management' during the euro crisis (Bauer and Becker, 2014: 18). Also, there has been an implicit recognition that the European Council (with the Council) does not manage to be an effective crisis manager, as it had to rely on the European Commission to step in to find common interest ground (sanctions against Russia) and manage a public good (vaccine and arms procurement) in the name of the EU. In short, in an unaltered decision-making context, the European Commission gained executive power (Bongardt and Torres, 2024; Fabbrini, 2023).

largest ever stimulus package – with a large part of the recovery funds earmarked for a green transition.

Nonetheless, as mentioned in the introduction, because of the destabilising situation created by the successive delays in implementing the green – notably energy – and digital transitions, EMU’s sustainability was again cast in doubt when the security and energy crisis struck. By the end of 2022, high stagflationary risks had created major challenges for the good functioning of EMU, with risks of financial fragmentation and instability.

On the monetary front, the trade-off between price and financial stability came again to the fore, although the causes of stagflation go beyond the monetary domain (member states’ energy policy options, issues of regulation and non-use of taxation at the national level to curb market distortions). That trade-off points to the urgent need for common fiscal and economic instruments in order to deepen public and private risk-sharing in the euro area. At the same time, the revision of the SGP has led to a reopening of old debates (moral hazard, debt levels and legacy) and divisions among member states that show both a lack of trust and of political willingness on the part of different member states to avoid or at least to smoothen the conflict between national sovereignty and the European common interest (Wyplosz, 2023).

The succession of crises shows how EMU’s sustainability hinges on the broader EU governance framework, notably on the existence of a permanent central fiscal capacity, important for responding to immediate challenges and also as a mechanism of sustainable (well accepted, democratic) integration. Some common ground

will need to be found, if only on the new own resources to finance the temporary NGEU and its Recovery and Resilience Facility. There is a wide range of potential European public goods across policy areas, not least environmental policy and the fight against climate change, a fact that may indicate a way forward for European integration, among which a permanent fiscal capacity. Their realisation depends on whether the common interest speaks louder than member state interests (especially given the obstacle of sovereignty reservations like in the case of taxation or energy sources).

The very succession and simultaneity of crises imply that policies need to address them in a coherent and holistic way to be effective. Conversely, failure to push ahead with the climate agenda “will not only complicate the task of central banks, but will pose grave risks to economic stability and global well-being” (Gopinath, 2022). The ECB has acknowledged that to finally implement that long-due EU priority would not only make the economy greener and less dependent on unreliable partners, but it would also reduce the risk of energy inflation (Lagarde, 2022).³⁶ It follows that governments should correct incentives and price in the negative effects of carbon more effectively.³⁷

36 Attempts to reduce the risk of supply shocks (volatility) through the diversification of global trade and help boost potential output around the globe also need to englobe correcting market distortions by pricing in environmental damage and avoid (again) short-termism (Bongardt, 2023; Bongardt and Torres, 2023).

37 As put by Heemskerk, Nerlich and Parker (2022), this becomes easier as the pressure on fossil fuel prices subsides. Pricing in would also offer governments revenues to support the necessary green invest-

Like the Covid-19 pandemic crisis, the energy and security crisis also had the potential to support the European Green Deal narrative and bring the green transition forward (Torres, 2023). It laid bare (unsustainable) fossil energy demand and consumption and protracted EU energy market integration. The EGD / green energy transition link became even more compelling and urgent.

In the EU, sovereignty reservations have held back energy policy as far as energy sources (member states' energy mixes) are concerned. Yet, the war in Ukraine and its fallout have led, at least initially, to some preference convergence that has allowed for a larger consensus on the need to exit faster from fossil energy sources *cum* accelerating renewables. Visegrad countries toned down their criticism of the EU's climate policy once the Commission labelled the push for renewables, energy efficiency and emissions reductions as 'security policy'. At their March 2022 Versailles summit, EU leaders agreed to phase out dependency on Russian gas, oil and coal imports as soon as possible. The RRF became the EU's chosen vehicle also to strengthen its strategic autonomy by diversifying energy supplies and ending the Union's dependency on imported Russian fossil fuels. In 2022, the new REPowerEU plan provided additional grants, allowing member states to add a new chapter to their national recovery and resilience plans as to finance key investments and reforms in line with its objectives. The programme is to accelerate the shift to renewables in the EU although the jury is still out on its net effect on the green transition.

ments, a win-win situation. Cutting counterproductive subsidies is of course another.

Akin to the pandemic crisis, the energy and security crisis was also addressed through the lens of the EGD, as one would expect of a new building block of the EU's economic model. The ECB, in the monetary domain, has joined the European Commission in advancing the EGD as a third building block of the EU economic model. It has pledged to align its policies with the Paris climate objectives and its recent strategy review also reflects the concern of strengthening the resilience of monetary policy and its balance sheet in the face of climate risks. The ECB has also reconsidered the notion of market neutrality in order not to reinforce pre-existing inefficiencies in the presence of market failures (Schnabel, 2021). The argument is reinforced by Schoenmaker (2021), who shows that tilting the asset and collateral framework towards low-carbon assets (without undue interference with the transmission mechanism of monetary policy) reduces carbon emissions in the ECB's corporate and bank bond portfolio by over 50 per cent.

As discussed above, the ECB derives its legitimacy not only from delivering price stability, but also – its wider output legitimacy – from acting as a guardian of EMU objectives, doing “whatever it takes to preserve the euro” and guaranteeing the sustainability of EMU as such (see table 4 below).³⁸

38 To better discuss the ECB's legitimacy, I have used a framework that sets the credibility and political constraints affecting monetary policy (devised by Persson and Tabellini, 1990, 2000, 2003, and Drazen, 2000, and discussed in Drazen, 2001, and Torres, 2013) against input, output and throughput legitimacy (as coined by and discussed in Scharpf, 1999, Lord and Magnette, 2004, Risse and Kleine, 2007, Schmidt, 2012) and the means (and phases) of addressing them.

Table 4 – Impact of the various forms of legitimacy on EMU’s sustainability

Form of legitimacy	Contribution to EMU’s sustainability
(Narrow) Input legitimacy	Treaty amendments re-confirming the main objectives of EMU and enlarging its scope (under the economic pillar).
Throughput legitimacy and responsiveness	Pursuit of informal dialogue between the ECB and the European Parliament (in the role of a principal in the making). Applies also to other spheres of EMU (financial, economic and social, fiscal, environmental), which are areas of national or at the most shared competencies, but which affect monetary policy and its sustainability. Greater ‘responsiveness’ to EMU cum EU governance.
(Wider) Output legitimacy	Wider EU multi-level regulatory model, including various, more or less institutionalised, common goals and policy areas. Contributes to: the acceptance of the redistributive spillover effects of EMU; the prevention and correction of negative externalities from the economic side (fiscal, financial, environmental) affecting monetary policy; and, in turn, to EMU’s sustainability.

Source: Torres (2013).

In the end, to deliver price stability the ECB needs to take into account all factors affecting inflation (also those reducing the likelihood of higher and more volatile energy prices) and climate change is one of them.³⁹

³⁹ Very much in tune with the Dasgupta review (2021), Frank Elderson (2023), member of the ECB’s Executive Board, stated: “Our economy relies on nature. Thus, destroying nature means destroying the econ-

Besides its primary objective of keeping prices stable, the ECB's secondary objectives (broad secondary mandate), notably contributing to a high level of protection and improvement of the quality of the environment, are fundamental to ensure not only environmental sustainability but also the sustainability of the process of European integration and the very survival of EMU.⁴⁰

The ECB had already taken part in wider economic policy debates, such as on structural reforms. By joining the European Commission in advancing the green transition, it has brought climate change into the debate and the discussions about its own course of action (and mandate), contributing to “a high level of protection and improvement of the quality of the environment”. The internalisation of the need to do its part to reduce the costs of the green transition and help to ensure price stability in the long run has therefore come to be part of the main strategic objectives of the ECB. That is why the ECB has engaged with work on climate change, aiming at better managing climate-related risks, supporting the green transition in line with the EU's net-zero objectives and fostering wider action from others (Lagarde, 2022).⁴¹

omy. Preventing the former is in the realm of elected governments as nature policymakers. We as ECB have to take nature-related risks into account in the pursuit of our mandate”.

40 The ECB focuses on three main objectives: managing climate-related risks; supporting the green transition; and fostering wider action. See <https://www.ecb.europa.eu/ecb/climate/html/index.en.html>.

41 Supporting the green transition is not by itself a sign of dominance (see for instance Reis's (2022b) types of dominance – table 1) preventing the ECB from lowering inflation. See also De Grauwe (2022a), Reis (2022a), Schoenmaker (2021) and Konradt et al. (2024), who argue that European central bankers can support the green transition without fear of derailing price stability objectives as increased carbon prices

For the ECB, in paving the path towards a green economy, “the necessary transformation of the economy and financial system can only be achieved by proactive and swift action across borders and sectors. Central banks can and should be part of this concerted effort” (Elderson and Schnabel, 2023).⁴²

Still, in 2022, securing energy supplies became a paramount concern. National governments invested in fossil-fuel infrastructure, reopening coal-fired plants and constructing liquefied natural gas terminals, which may lock in the usage of carbon-intensive fuels. Adding to that, the provision of energy price subsidies does not only contribute to higher public deficits, but it also masks the price signals given by changes in relative prices, which are however needed to incentivise lower consumption of fossil fuels, behavioural changes and greater investment in green technology (Heemskerk, Nerlich and Parker, 2022). Under-pricing fossil fuels, as many governments in the EU have been doing, leads to overconsumption and global warming (Gaspar and Amaglobeli, 2023), prolonging non-sustainable consumption and production

are likely to have only a modest and short-run inflationary impact, or even deflationary consequences by driving technological change and economies of scale, which may be counteracted by non-price climate regulations. Also, an important part of the ECB’s initiatives has been in banking supervision, where banks must recognize and account for the climate-related risks on their balance sheets in its multiyear exercise, risking daily fines in case they fail to report those risks.

42 Massoc (2024) argues that there was a coalition-building between pro-climate central banks and pro-climate politicians in the European parliament. For Moschella (2024a; 2024b), both the Fed and the ECB felt compelled to build back public support by expanding monetary policy remit to include inequality and climate change goals, respectively.

patterns and worsening global heating. The effects of all those misguided actions are to risk hindering the green transition whereas what is needed is an intensification of that process in order to reduce the costs of the transition and help to ensure price stability in the long run.

4.1 The need for preferences to converge on a sustainable ‘European model’ of society

The European economic and social model is a key ingredient of the EU’s identity (its affirmation passes also through the digital domain). However, it can only prosper in the context of today’s more fragmented international arena if the EU is successful in its policy to also reach out and affirm and export its key values to the international level by all means available, be it through trade agreements, the Brussels effect, or other, which is clearly not the case since at least 2023.

From 2020 to 2023/4, EU institutions, notably the European Commission and the ECB, and some national and international institutions, have been responding to the latest crisis developments by adapting rules and policies, which will have a positive effect in the longer run. However, EU responses have given rise to a more political (and value based) EU, characterised by EU market activism (McNamara, 2023), both internally and externally directed (rules for positive market integration, also in regard to external trade). As an unintended consequence, a more (geo-)political EU has entered a territory that member states have traditionally considered theirs. This fact may explain the extent (and intensity) of

opposition to the implementation of various important elements of the EGD.⁴³ There are limits to what the EU can achieve. Competence issues loom large in decision-making.⁴⁴ Reforming the wider EU regulatory framework needs the approval of member states. Yet, after some consensus created during the pandemic crisis and an initial convergence of preferences due to the war in Ukraine, there was reform fatigue (also in light of the electoral cycle, notably the 2024 European elections) but, more than that, one should acknowledge, also resistance to the need for common (substantive) responses to the current challenges that involve bringing actions forward and modify Europe's (unsustainable) production and

43 Examples include: the denaturing the EU Green Finance Taxonomy when gas and nuclear energy were classified as 'green' in the transition; taking the Ordinary Legislative Procedure hostage, by withholding final agreement on what had already been agreed; weakening an important element of the EGD, the EU Biodiversity Strategy in the European Parliament. See Torres (2023). One could also add as examples other areas of EU governance such as free movement (Schengen) and migration and the fate of the Corporate Sustainability Due Diligence Directive (CSDDD), requiring companies to monitor their global suppliers for human rights and environmental abuses, which was cast in doubt by the Council as many member states turned against it in spring 2024 and France and Germany, in a major push against the EGD, proposed to scrap it altogether with some other regulations. See Pankov and Ölmez (2025).

44 The German precedent, when revising the EU ban on sales of new combustion engine cars (Torres, 2023), became the norm in the EU Council, which has on multiple occasions reopened trilogue results that were supposedly agreed upon by the EP and the Council (IEEP, EGD Barometer, Fourth edition, May 2024 (<https://ieep.eu/wp-content/uploads/2024/05/European-Green-Deal-Barometer-2024-4th-edition.pdf>)).

consumption patterns.⁴⁵ At the end of the day, a successful EGD and green energy transition require ‘openness’ to further political integration.

45 On the broader political resistance to and contestation of the EGD, see Bongardt and Torres (2024a; 2024b; ongoing 2025).

5. Conclusion

In my lesson (this book) I focused on two open-ended mechanisms, EMU and the EGD, both of which add to the Single Market as building blocks of the EU's economic governance framework. I argued that their progress has hinged on preferences convergence, which is in turn conditioned by 'openness' to European integration and a European identity. Endogeneity (converging preferences in shared institutions) may partly explain the (relative) success of open-ended mechanisms such as EMU or the EGD. Conversely, differentiated integration acts as a constraint.

The implementation of the EGD's objectives remains a complex (and fragile) undertaking once it involves a whole legislative agenda to revise all EU policy areas as to ensure conformity. So does the implementation of several urgent reforms and institution-building necessary for the completion of the economic union side (banking union, fiscal capacity) of EMU.

To assure the (political) sustainability of the European integration process, EMU needs the EGD and vice versa (the two open-ended mechanisms interact and cannot be seen as independent) but also the strengthening of a (value-based, open) European identity. In the present setting that is characterised by multiple, overlapping crises, a shared European identity and values – which unfortunately are since 2023 in very low supply – assume particular importance for facilitating collective action and leaps forward and are fun-

damental for making the EU more resilient to shocks and European integration sustainable (and with a purpose) over time.

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This is an eloquent analysis of two important channels through which the EU finds itself on a path of further integration. The originality of the analysis is to study the links between the integration processes inherent in EMU and in EGD. Professor Torres is very successful in highlighting these interconnected integration processes.

Paul De Grauwe (in Preface)

John Paulson Chair in European Political Economy at the
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This is a very original approach to the study of European integration as an open ended process, which is shaped by events and crises and, in turn, shapes them. The subject matter is addressed by the author in a authoritative way which is based on a deep knowledge of the policies considered and the book is therefore an essential reading for anyone interested in the mechanisms of European integration.

Leila Simona Talani

Professor of International Political Economy
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Through careful analysis of European crisis response, Francisco Torres shows that how the European Union is a work in progress where participants across the member states are constantly learning by doing. This approach is vital to ensure that policy responses are coherent from one crisis to the next, and that political support develops alongside European governance arrangements. Great reading for anyone interested in understanding the resilience of the European project.

Erik Jones

Director of the Robert Schuman Centre for Advanced Studies at the
European University Institute, Florence

The European Monetary Union was a success, the European Green Deal less so, yet both remain incomplete. This insightful book argues that this is a feature, and not a bug, in an ever-adapting process of integration.

Ricardo Reis

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