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Conceptual Foundations of Economic and Monetary Union

The Economic Dimension

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1.1 INTRODUCTION

The birth of the euro on 1 January 1999 marked the inauguration of Europe's economic and monetary union (EMU).[1] The event was the culmination of a half-century-long journey from the European Coal and Steel Community and the customs union to the European Monetary System and single market. In another sense, however, it was only a waystation along the path to forging a true economic and monetary union.

Search for information on EMU and one is directed, unsurprisingly, to the website of the European Commission. There one learns that EMU 'is not an end in itself' but is rather 'a means to provide stability and for stronger, more sustainable and inclusive growth across the euro area and the EU as a whole'. Advancing those objectives, one then learns, entails four core policies: ensuring that the single market runs smoothly; implementing an effective monetary policy; coordinating the fiscal policies of the Member States; and supervising and monitoring European financial institutions.

An interpretation of this list is that the single market is the European Union's signal economic achievement and that the other aspects – a price-stability-oriented central bank, fiscal coordination, and financial supervision and regulation – are flanking policies designed to support that creation. The single market entails the removal of barriers to the free movement of goods, services, capital, and labour (the so-called four freedoms). It commits the Member States to refrain from extending state aid and from pursuing other policies that might tilt the playing field. Firms are thereby fully exposed to the chill winds of competition from producers in other Member States, sharpening the incentive for them to boost productivity and efficiency in order to survive. No longer limited by the extent of the domestic market, Member States can further specialize along lines of comparative advantage. Producers are better able to exploit economies of scale and scope.

Economic studies, starting with some written well before the single market was a fact, are nearly unanimous in concluding that its economic benefits are substantial.[2] The disruptions to

[1] The physical euro was issued only three years later, but exchange rates between the members' so-called legacy currencies were irrevocably locked at the beginning of 1999, and the euro could already be used for non-cash transactions.

[2] These opinions were as near unanimous as economists are about anything. An early influential analysis was Baldwin (1989). Subsequent studies added precision and refined techniques without changing the overall conclusion. For a representative recent example, see Veld (2019).

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British trade and production in early 2021, when the transitional period following Brexit ended and the United Kingdom lost its prior access to the single market, offered costly proof by counterexample. So too did the border closures that were imposed in the early stages of the COVID-19 pandemic.

The flanking policies are more controversial. Ever since the idea of the euro was first mooted, sceptics have questioned whether a single market needs a single currency. To put it another way, they have questioned how much adding a single currency to the single market enhances the four freedoms. There is disagreement about whether the role of the euro is to heighten price transparency, thereby strengthening the pro-competitive features of the single market, to facilitate cross-border trade within the euro area, to buttress currency and financial stability, or to fend off a political backlash against capricious exchange rate movements within the integrated economic zone. There are ongoing complaints about the costs to Member States of forgoing monetary policy autonomy and living with a one-size-fits-all monetary policy. More concretely, there is criticism of the European Central Bank (ECB) for interpreting its mandate too narrowly.

On the fiscal side, there are questions about exactly how closely fiscal policies must be coordinated in an economic and monetary union, and about how exactly such coordination should be achieved. The residents of different Member States have very different views of how large a budget deficit is acceptable and how much debt is too much (for evidence see, for example, European Commission, 2020). Even when there are benefits of fiscal centralization and coordination in a monetary union, club theory suggests going less far in that direction when preferences diverge (see e.g. Buchanan, 1965; Sandler and Tschirhart, 1997).

Moreover, the purported benefits of fiscal coordination achieved through the application of fiscal rules can be questioned. The counterargument is that the value of fiscal autonomy at the national level is greatest in a monetary union; eliminating distinct national monetary policies only strengthens the case for flexible national fiscal policies to address asymmetric shocks. A national government with its monetary hand tied behind its back has all the more reason to keep its fiscal hand free, as it is sometimes put. Insofar as the cross-border spillovers of national fiscal policies are small, the case for close coordination is weak, in which case giving Brussels oversight of national fiscal policies violates the principle of subsidiarity.[3]

The rebuttal starts with the observation that allowing Member States to accumulate excessive debt heightens the danger of 'fiscal dominance'. In the presence of heavy debts, the ECB will feel pressure to keep interest rates low in order to help Member States with their debt service costs, ultimately with inflationary consequences. In addition, when a government's debts become borderline unsustainable, confidence problems may spread contagiously to the bond markets of other countries, providing an additional rationale for preventing the development of those sustainability problems in the first place. Public debt crises can also become banking and financial crises, since banks, and not only in the debt-issuing jurisdiction, hold concentrations of government bonds.

Similarly, there is contestation over the need for and competences of a single financial supervisor at the EU or euro area level. The argument for a single supervisor is that banks do business with one another, and that Europe's big banks, in particular, do business with banks in other Member States. Even though what happens in one national banking system doesn't always

[3] The conclusion that cross-border spillovers are weak in a monetary union flows from standard versions of the Mundell–Fleming model: when a member runs larger budget deficits, for example, it sucks in more imports from other members, which is expansionary throughout the monetary union, but it also pushes up the common level of interest rates, which is contractionary throughout the monetary union. The two effects at least partially, if not completely, cancel each other out.

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stay in that one national banking system, national supervisors may nonetheless have inadequate incentive to internalize the consequences for banks in other countries. Memoranda of understanding, in which separate national regulators agree on a division of labour and limited information sharing, have not been up to the task.

At the same time, banking systems in Europe are still mainly organized along national lines. Small banks still do most of their business at home. It can be argued on these grounds that they are best supervised by national authorities attuned to the nuances of local markets.

When the EU created its Single Supervisory Mechanism (SSM) in 2013, it opted to split the difference, giving supervisors within the ECB responsibility for oversight of Europe's biggest banks. Oversight of the others is reserved for national supervisors, operating in principle under the same rule book, of course. But the threshold above which banks are sufficiently large and systemically important to warrant supervision by the SSM is arbitrary. In addition, the Member States outside the monetary union can opt into the SSM, but only some (Croatia and Bulgaria) have chosen to do so.

1.2 EFFECTIVE MONETARY POLICY FOR THE EURO AREA

How important is the common currency for the operation of the single market? Intuition suggests that most of the benefits, in terms of competitive pressure or X-Efficiency (Leibenstein, 1966), economies of scale and scope, and national specialization, can be obtained by removing trade barriers at and behind the border and allowing the free movement of factors of production.[4] Obtaining them does not also require the addition of a common currency. This was the presumption of pre-euro studies such as Feldstein (1991), Obstfeld (1997), and Wyplosz (1997). Many examples support this conclusion. Danish exporters of dairy products, for example, do not appear to suffer from their country's retention of a separate national currency, the krone. It might be objected that this fact follows from Denmark's distinctive ability to hold its currency stable against the euro. But the United Kingdom has always had a more variable exchange rate and yet Scottish salmon processors did not obviously suffer major inconveniences from pre-Brexit Britain's retention of the pound sterling. Rather, the spanner in the works came later, at the beginning of 2021, when access to the single market was lost. Similarly, the United Kingdom's retention of a separate sovereign currency did not prevent London from becoming the leading centre for euro-related financial business. Rather, the City's ability to compete hinged not on the currency regime but on passporting rights conferred by the country's membership in the single market and its ability to attract financial talent (that is, it depended on labour mobility).

Some studies suggest, however, that the impact of monetary union on trade, and by implication on production and specialization, is large and significant. Rose (2000) famously found that two countries sharing a common currency trade three times as much with one another as their other characteristics would lead one to expect, even controlling for a long list of other country characteristics, including whether or not the partners are in a regional trade agreement. The objection, of course, is that the single market is more than a regional trade arrangement, so the large effect ascribed to monetary union is really picking up behind-the-border liberalization and other measures associated with the single market.

[4] In some models (Heckscher–Ohlin for example), factor mobility is redundant once trade barriers have been removed, at least as long as economies remain within the 'cone of diversification'. When factor endowments vary sharply and/or the strong assumptions of Heckscher–Ohlin are relaxed, however, this may no longer be the case.

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Subsequent studies took advantage of the fact that additional members of the single market, starting with Greece, switched from their national currencies to the euro some years after entering the single market, strengthening the argument that the observed increase in trade following the switch was the effect of the common currency per se. Most such studies adopting this approach continued to find substantial effects of the single currency: Head and Mayer (2014) consider more than 100 such estimates and calculate that the mean effect is a doubling of trade. But Glick and Rose (2015) show that estimates of such effects are highly sensitive to methodological choices. They caution that it may be impossible to estimate the aggregate trade effect of currency unions such as Europe's with confidence. Not for the first time in the history of economic analysis, the jury remains out.

Another perspective is that the euro has been important not for trade but for financial flows. McKinnon (2000) was an early proponent of the view that the elimination of currency risk would foster the integration of national bond and equity markets and enhance the depth and liquidity of securities markets throughout the euro area. Capiello et al. (2006), among others, provided early evidence to this effect. On the side of financial stability, one can well imagine that, in the absence of the euro, there might have been sharp changes in the relative value of different EU currencies following the failure of Lehman Brothers in September 2008 and that this would have wreaked similar havoc. Banks and households with foreign-currency-denominated liabilities would have suffered additional balance-sheet distress had their central banks still been in the business of issuing national currencies and had some of those currencies depreciated sharply on the foreign exchange market.[5] Here Poland's experience with Swiss franc mortgage loans serves as a cautionary tale.

The retort in this case is that the euro has been as much the problem as the solution from a financial-stability perspective. The decade leading up to the Global Financial Crisis saw enormous financial flows between the northern and southern European members of the euro area and dramatic yield-spread compression (Lane, 2012). Some narrowing of spreads was justified, of course, by the narrowing of inflation differentials following the advent of the single currency. But there appears to have been a peculiar assumption on the part of investors that credit (default) risk also declined with adoption of the euro, justifying additional spread compression. There may have been false confidence that a member of a monetary union could not default on its debt (a misapprehension that would have been corrected by even a brief reconnaissance of the relevant history of public debt). There may have been false confidence in the efficacy of the euro area's fiscal rules. Or there may have been the belief that a Member State with debt difficulties would receive a bailout from its monetary union partners adequate for protecting its creditors from the application of a haircut.

The test case, Greece, received foreign financial assistance, as anticipated, but was nonetheless forced to restructure its domestic-law bonds, writing down their value. The creditors received a harsh reminder that the advent of the euro did not mean the elimination of credit risk. At the same time, the ECB insulated the bond markets of other euro area members from contagion by announcing a programme of Outright Monetary Transactions (OMT, potential purchases of government bonds on the secondary market). This was an impressive demonstration of the role of the central bank in ensuring the stability and smooth functioning of the euro

[5] Historically, banking crises have wreaked havoc with the stability of exchange rates and financial conditions. Recall for example the wider repercussions of the Finnish and Swedish banking crises of 1991–92. Finland and Sweden were not members of the European Community at that time, but their currencies were effectively pegged to the German Deutschmark, the anchor currency within the Exchange Rate Mechanism (Eichengreen and Naef, 2020).

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area. The ECB responded with an even more extensive set of asset purchases in 2020, when Europe was battered by the COVID-19 pandemic and economic crisis.

In all, this history illustrates how conceptions of 'an effective monetary policy for the euro area' (to quote the Commission again) evolved over the first two decades of monetary union. At the outset, the ECB was conceived as responsible for implementing a monetary rule rather than acting as a regulator, lender, and liquidity provider of last resort (Folkerts-Landau and Garber, 1992). This reflected Germany's aversion to inflation and fidelity to policy rules; it reflected the practical calculation that no European monetary union could succeed without German participation. In its early years, the ECB saw itself as targeting inflation, pure and simple, rather than as influencing financial conditions.[6] As Jean-Claude Trichet, then ECB president, insisted in 2011, it was not the role of the ECB to backstop the bond market. Instead, governments were obliged to manage their affairs

> individually and collectively, to ensure financial stability. [This] is the way Europe has been constructed and it is the way, it seems to all of us, we must proceed. If it is not done by governments, it will not be credible ... On the concept of last-resort lending ... We don't intervene for financial stability reasons. We consider that is the responsibility of governments.[7]

This presumption changed, irrevocably it would seem, with Mario Draghi's 2012 pledge to 'do whatever it takes' to preserve the integrity of the euro area and, by implication, the single market. This, clearly, was not your mother's ECB. It was not even Jean-Claude Trichet's.

The focus and policies of the ECB continued to evolve over the subsequent decade. New objectives include fostering the EU's green transition: under Christine Lagarde, who succeeded Draghi in 2019, the ECB agreed to accept bonds with coupons linked to sustainability performance targets as collateral and invested in the euro-denominated green bonds of the Bank for International Settlements. In addition, Lagarde discussed the need for the ECB to prioritize issues of economic inequality, including gender inequality. These are controversial areas for a central bank by virtue of their non-traditional nature. They are not explicitly addressed in the central bank's statute and mandate, in contrast to the maintenance of price stability.[8]

Moreover, they pose special problems for the ECB, which is arguably the most independent central bank in the world. Central bank independence can only be sustained when it is accompanied by accountability – when the central bank's achievements can be gauged relative to its mandate and when its policy decisions are evaluated in those same terms.[9] In the absence of such accountability, an independent agency of government such as the ECB will lack democratic legitimacy, in which case a political backlash is apt to follow. Unfortunately, a central bank's success at mitigating climate change and inequality is harder to assess than its success at achieving price stability or even financial stability. The central bank's instruments are further removed from such targets, compared to its ability to influence and control inflation, and those unconventional targets are affected more powerfully by intervening variables controlled by other parties. This creates challenges for accountability. A central bank that strays too far in the

[6] Formally, the ECB had a two-pillar strategy, where it targeted inflation and monetary aggregates (this last target being an inheritance from the Bundesbank). For an early warning of the need for a central bank that does more than follow a monetary rule, see Folkerts-Landau and Garber (1992).

[7] Quoted from Trichet testimony before European Parliament (2011).

[8] Although one can argue that they are implicit secondary objectives of the ESCB under Article 127(1) TFEU (secondary in that they may be pursued insofar as they do not conflict with the primary objective of price stability). See also Adamski, Chapter 9 in this volume, Schoenmaker and Stegeman, Chapter 12 in this volume.

[9] In the words of Adrian and Khan (2019), central bank independence and accountability are 'two sides of the same coin'.

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direction of pursuing these non-traditional objectives will have reason to worry about its independence. In addition, there is reason to worry about violating the Tinbergen rule, that the number of achievable policy goals cannot exceed the number of available policy instruments.

That said, the single market cannot function smoothly and provide for 'stronger, more sustainable and inclusive growth across the euro area and the EU as a whole' (European Commission, n.d.) if climate change and inequality remain unaddressed, since these are among the existential economic policy problems of our day. It would be more comfortable for all concerned were they addressed by other authorities possessing instruments more directly relevant to solving them. It would be more comfortable if the challenge of climate change was addressed by the fiscal authorities controlling the level of carbon taxation, and if inequality was addressed by tax and transfer policies more generally. But action by these other authorities can't be taken for granted. To the extent that climate change and inequality rise to the level of all-hands-on-deck emergencies, neither can they be ignored by Europe's monetary authorities. Doing too much will create risks for central bank independence. But so too would doing nothing at all.

1.3 COORDINATING THE FISCAL POLICIES OF EU COUNTRIES

Europe's best known, some would say most notorious, device for monitoring and coordinating national fiscal policies is the Stability and Growth Pact (SGP). The Pact was put in place in 1992, at Germany's behest, as a filter to determine which Member States might be eligible to participate in the monetary union.[10] It became notorious because the key provisions, that debt ratios could not exceed 60 per cent of GDP, or that they at least had to be converging to that level at an acceptable pace, while deficits could not exceed 3 per cent of GDP, were picked out of a hat, more or less. Sixty per cent just happened to be the Europe-wide debt-to-GDP ratio at the time, while 3 per cent was the deficit consistent with keeping it there, given then prevailing, equally arbitrary assumptions about growth rates and interest rates. From the start, there were doubts about the enforceability of these thresholds (Eichengreen and Wyplosz, 1998). Were arbitrary targets credible? Were European governments really prepared to sanction one another for violations, knowing that they themselves might next be called on the mat? Were they prepared to levy fines, given that the obligation to pay such penalties would be an additional budgetary burden on an already fiscally challenged government?

Nor is the justification for the Pact straightforward. The most compelling rationale for a procedure designed to safeguard against excessive deficits is to avoid fiscal dominance, prevent inflation, and avoid the need for emergency rescues of governments by the ECB. This rationale was widely advanced at the time (James, 2012). But the SGP is an obligation of all twenty-seven EU members, not just those that have adopted the euro. Its legal basis is Articles 121 and 126 of the Treaty on the Functioning of the European Union (the Treaty of Rome as updated and renamed in 2009), not any treaty relating specifically to the euro. Nothing that happens in Denmark, Sweden, or Poland in terms of fiscal policy obviously has first-order implications for ECB policy or for inflationary pressures in the euro area. So, applying the SGP to the EU as a whole seems like a non-sequitur.

[10] Strictly speaking, these provisions of the Maastricht Treaty were known as 'convergence criteria'. They were repurposed as provisions of the Stability Pact and extended into the period of monetary union itself at the behest of the German finance minister, Theo Waigel, in 1995.

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It can be argued that the SGP is designed to encourage such Member States to ready themselves for membership in the euro area, by inter alia bringing their debt and deficit ratios down to prescribed levels. But it remains unclear why, in this case, the Pact should apply to members, such as Denmark and Sweden, that regard themselves as possessing opt-outs from euro adoption.

Alternatively, it could be argued that fiscal problems in a non-euro area Member State may disrupt the convergence process within the EU and risk putting unbearable strain on the Union. If what happened in Greece starting in 2010 happened in a non-euro area member such as Poland, the euro area would feel serious repercussions, given the spillover from recession, financial links, potential for significant migration, and political recrimination. There is of course the argument that what happened in Greece could not happen in Poland, since the latter, unlike the former, retains a national currency and a central bank capable of monetizing the public debt. But if the result is a sharp depreciation of the zloty, there still could be serious repercussions for the euro area. An obvious riposte is that Poland's problems, under these circumstances, are appropriately addressed by the International Monetary Fund (IMF), not by the European Commission, the ECB, or other EU Member States. Greece's experience starting in 2010 indicates that the EU is uncomfortable with this solution. At best, the question remains unresolved.

The original Stability Pact formulation having been rigid and unaccommodating of national circumstances, the EU has moved to make its fiscal rules and procedures more flexible. The procedures now start with multi-stage monitoring. The European Commission formulates forecasts for the Member States, assesses national budgets in their light, and publishes an 'Alert Mechanism Report' that points the finger at countries at risk of imbalances, including of a fiscal variety. At the prevention stage, EU Member States and the Commission negotiate Medium-Term Objectives designed to ensure the long-term sustainability of the public finances and national debt. These EU-wide recommendations are reinforced by a second set of preventative measures specific to euro area Member States, whose governments are obliged to draft and present budgetary plans annually to the Commission and their euro area partners.

If this were not enough, in addition there is the Fiscal Compact (formally the Treaty on Stability, Coordination and Governance). This is intended to limit the size of the structural (full employment) budget deficit that a government can run under normal circumstances to 0.5 per cent of GDP.[11] Signatories are obliged to transpose the Treaty's provisions into national law, in much the way that Germany's balanced-budget law, or debt brake, limiting structural deficits to 0.35 per cent of GDP, has now been embedded in that country's Basic Law, or constitution. The Fiscal Compact is an obligation of the nineteen members of the euro area; in addition, Denmark, Bulgaria, and Romania have opted in. It was designed, once again, to obtain German acquiescence to deepening economic and monetary union (notice the pattern). In effect, other countries adopted a Germany-style debt brake in return for Berlin agreeing to establish an emergency financial assistance mechanism – what became the European Stability Mechanism.

The rationale for focusing on the structural deficit rather than the headline deficit is to allow automatic fiscal stabilizers to respond to cyclical conditions. This makes sense insofar as rigid

[11] That limit can be increased to 1 per cent of GDP for governments with debt-to-GDP ratios significantly below 60 per cent. Where the structural deficit exceeds these limits, it must be adjusted by 0.5 per cent of GDP per annum (on average). The word 'intended' is meant to signal that there can be and have been gaps between aspiration and achievement.

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application of the SGP may prevent automatic stabilizers from coming into play in countries close to or exceeding its thresholds. The problem is that the structural balance is not observable and is likely to be subject to significant measurement error; for example, estimating the structural balance requires knowing the full-employment level of GDP, about which there is no agreement.[12] And because the Fiscal Compact supplements rather than replaces the SGP, countries are simultaneously subject to conflicting ceilings on both their structural and headline deficits.

Again, arbitrary numerical thresholds, in this case 0.35 and 0.5 per cent of GDP, are difficult to defend. If their rationale is that structural deficits are permissible when used to finance productive public investment that pays for itself, then discussion should start by determining the cost of the productive public investment projects available to the government, and then solve for the permissible structural deficit, rather than starting with the latter. Historically, public investment in the euro area has run at 3 per cent of GDP (ECB, 2016). Not all of this is necessarily productive, of course, but much is. This means that enforcing a structural deficit limit of 0.5 per cent of GDP will require Member States to fund much of their productive public investment out of current revenues, which seems perverse, given that the returns on such investment accrue over time and can be used to pay off the resulting debt.

Finally, Member States whose overall budget deficits exceed 3 per cent of GDP or whose public debts exceed 60 per cent of GDP and are not declining at a satisfactory pace (the original Stability Pact limits) are required to submit to the EU's Excessive Deficit Procedure. This obliges them to eliminate each year a twentieth of the gap between the current debt ratio and the 60 per cent reference value. Thus, the Italian government, with a debt-to-GDP ratio of 160 per cent, is ostensibly obliged to lower that ratio by 5 percentage points of GDP each year for twenty years. In practice, of course, governments cannot commit their successors to a fiscal strategy, especially when it is defined for such a lengthy period. In addition, real interest rates have trended downward for several decades, which eases the process of debt management for a country in Italy's position and reduces the urgency of fiscal consolidation. While it is uncertain whether that trend will now reverse direction, for demographic or other reasons (as argued by Goodhart and Pradhan, 2020), the possibility cannot be ruled out. For a growth-challenged country like Italy, the assumption that the real growth rate will exceed the real interest rate for the next two decades is – how to put it? – optimistic. And as Eichengreen and Panizza (2016) have shown, instances in which countries succeed in running primary budget surpluses as large as 5 per cent of GDP for extended periods are rare.

The upshot is that the EU's fiscal rulebook has become extremely complicated, running to more than 200 pages (Wieser, 2018). This complexity reduces transparency, allowing politics to intrude into disputes among Member States, and creates tensions between governments and the Commission.

There is no consensus about the best direction for reform. One currently fashionable idea involves replacing all of the above with a country-specific public spending rule (see e.g. Claeys et al., 2016; Benassy-Quere et al., 2018). Governments would start with forecasts by independent experts of the growth of GDP and tax revenues, both in nominal terms. They would then solve for a path for the growth of public spending net of interest payments and perhaps also of unemployment spending that brings the debt ratio down at an acceptable pace. This procedure would have several advantages over the status quo. Since GDP and tax revenues are directly

[12] Orphanides and van Norden (2002) famously showed that ex post revisions of the output gap are of the same order of magnitude as estimates of the output gap themselves.

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observed, unlike the output gap, they are easier to forecast than the structural balance. Nominal public expenditure can also be observed and, unlike the structural deficit, is directly controlled by the government. Automatic fiscal stabilizers are still allowed to operate on the revenue side, so the rule has reasonable cyclical properties.[13] The tendency to raise spending in the expansion phase of the business cycle, when revenues rise, a problem that is apparent in the historical record, would be directly restrained.

This proposed fiscal rule is not perfect (no rule is). Forecasting nominal GDP and revenues may be easier than forecasting the output gap, but easier is not the same as easy. The specific target for the debt-to-GDP ratio, whether 60 per cent as a holdover from the SGP or some other number, has no justification in economic logic. The length of time, perhaps twenty years, that countries are allowed to take in order to eliminate discrepancies from target is similarly arbitrary, boding problems of credibility and compliance and threatening continuing tensions between national governments and the Commission. Some (e.g. Eichengreen and Wyplosz, 2016) argue that European governments should focus on strengthening their national fiscal institutions by increasing the transparency of the budgeting process and delegating more powers to independent fiscal councils, and leave it at that. However, this does not seem to be Europe's way.[14]

A separate line of thought is that the problem is not the presence of complex and restrictive rules designed to avoid excessive deficits but rather the absence of a system for transferring fiscal resources among Member States, akin to the fiscal federalism that exists in the United States (or, for that matter, within Europe's own federal states, such as Germany). Its absence leaves Member States doubly constrained in the event of asymmetric shocks, given that this is when limits on the ability of heavily indebted Member States to borrow tend to kick in. In part, opposition to such a system flows from the fact that it would not be constructed behind a veil of ignorance: everyone knows (or knew) which way fiscal resources will flow within this 'transfer union'. (Or at least that's what people in the 'Frugal Five' countries will tell you.) In addition, opposition to such a system rested on moral hazard concerns, that additional resources would only encourage excessive spending by more profligate recipients.

In 2020, these reservations were finally overcome by the COVID-19 pandemic and its economic and financial effects. Member States agreed to the issuance of €750 billion of EU bonds to fund the Recovery Plan for Europe (also known as Next Generation EU). The plan was divided in roughly equal proportions between grants and loans. Loans can be requested in amounts up to 6.8 per cent of a member's 2019 Gross National Income. But since, in contrast to sovereign bonds, this additional debt will be backed by the full faith and credit of the entire group of members, and by transfers from the EU budget again funded by the entire group, the result will be fiscal federalism after a fashion.

Concerns about moral hazard and excessive spending took a back seat to European solidarity in response to a virus that was inadvertently imported into Europe, where additional public health spending and other measures to both staunch the economic losses from lockdowns and support recovery were of the essence. Concerns that the money would be used irresponsibly

[13] In addition, a negative (positive) demand shock that lowers (raises) inflation will translate into more rapidly (slowly) growing real public spending, providing another channel for automatic stabilization.

[14] The obvious explanation is that the problem of democratic accountability raised in Section 1.2 in the context of monetary policy is even more severe for independent fiscal institutions, given the prominent distributional dimension of fiscal policy. Blanchard, Leandro, and Zettelmeyer (2020) suggest a middle way, abandoning the EU's complex system of rules but replacing them with standards – e.g. qualitative prescriptions for what debt sustainability means in each individual country context – together with adjudication of whether those standards are being met by an independent body, such as the European Court of Justice.

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were addressed by requiring governments to submit a detailed 'recovery and resilience plan' detailing how borrowed funds would be used to support recovery and transition to a green, digital post-pandemic Europe.

Still, this is no more than a baby step in the direction of fiscal federalism, much less fiscal union. Not only is €750 billion less than 5 per cent of the EU's €16 trillion economy, but the resulting resources will be transferred to the Member States over a period of six years. The only 'own resource' (dedicated source of EU revenues) associated with debt service was a tax on recycled plastic. So, it was unclear whether financial resources sufficient to service more than the initial €750 billion tranche would become available to the EU over time. Similarly unclear was whether EU Member States would be prepared to do in normal times what they did during a once-in-a-century pandemic. Much will depend, presumably, on how efficiently governments utilize the initial tranche of funds.

1.4 SUPERVISING AND MONITORING EUROPEAN FINANCIAL INSTITUTIONS

The idea that economic and monetary union should be accompanied by banking union was not part of EMU's original design. National banking systems differed in their particulars, favouring the delegation of financial supervision to national authorities, and the extent to which the different systems were interdependent was not fully appreciated. Interdependence was in fact relatively limited until the 1990s, reflecting strict financial regulation, extending to the maintenance of capital controls. Events like the failure of Herstatt Bank in 1974 should have been a wakeup call, but that episode focused attention on settlement risk in the foreign exchange market (Norman, 2015), not on the interdependence of internationally active banks more generally. Subsequent to Herstatt, capital standards for internationally active banks were negotiated in Basel, but they were then transposed into national and European law. In these respects, one can criticize European officials for their lack of foresight, but one can also criticize academics for their lack of insight. Early contributors to the literature on optimum currency areas, while focusing on asymmetric shocks, labour mobility, and fiscal federalism, said almost nothing about the need for banking union.[15]

This assignment of responsibilities was challenged and ultimately overturned by the Global Financial Crisis and the euro crisis. One factor contributing to the euro crisis was how freely northern European banks lent to southern European banks and governments. Once credit problems developed in Europe's south, the stability of those same northern European banks was called into question. The possibility of restructuring southern European debts, which might have taken some of the pressure off embattled governments and residents, was precluded by fear of the consequences for those same undercapitalized northern European financial institutions. Instead, it was necessary to throw large amounts of financial assistance, funded by EU Member States and the IMF, at teetering banks and governments across the euro area's periphery.

This experience made clear that national regulators had failed to adequately internalize the cross-border repercussions of their policies: French and German regulators failed to prevent domestic financial institutions from lending hand over fist to southern European banks and from accumulating large concentrations of southern European government bonds. In addition, national regulators failed to address the risks for the euro area as a whole created by the fragility of large, systemically important banks. Relatedly, those national authorities lacked adequate mechanisms for resolving, or winding up, insolvent financial institutions.

[15] I can point to having written one page on this subject in Eichengreen (1993).

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Hence the sea change in 2013 that bequeathed the Single Supervisory Mechanism (SSM) situated in the ECB. The ECB directly supervises the euro area's largest banks while cooperating with national supervisors in supervising smaller institutions. Placing the SSM in the ECB was controversial, since it raised the possibility that the central bank might take its eye off inflation. But the ECB was the only EU entity with the necessary administrative capacity and technical expertise.[16] Assigning it this additional responsibility was yet another step in the evolution of the institution, as described in Section 1.2.

Accompanying the SSM was the Single Resolution Mechanism (SRM), intended to ensure that, in the event of failure of a systemically important bank, the institution in question would be recapitalized or wound up without resort to taxpayers' funds. The SRM takes the lead in resolving big banks, while the national authorities do so for other financial institutions (though early practice suggests that, in case of doubt, national authorities take the lead in such interventions). Resolution planning is by an independent Single Resolution Board. The decision of whether and how to implement the plan is then made in conjunction with the ECB (the relevant supervisor) and the European Commission (the relevant executive).[17] Injections of new capital from the SRM require, as a precondition, first writing down 8 per cent of the bank's balance sheet as the contribution of existing creditors.

In addition, the European Systemic Risk Board (ESRB) was established in 2010 to oversee macroprudential supervision and coordination at the national and EU levels. Three European supervisory authorities were then created to oversee specific markets. These were the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA), and the European Insurance and Occupational Pensions Authority (EIOPA). The EBA was charged with coordinating banking supervision in the EU, since supervision of all but the largest banks remained the remit of national authorities, as noted, and with writing the single rulebook of banking activity in the EU. The other authorities did likewise for capital markets and the insurance industry, respectively.

The EU emerged from this round of reforms with a complex regulatory architecture. This was unavoidable, perhaps, since regulatory reform entailing negotiations among more than two dozen countries requires compromise over institutional design as well as substance.

How well have the resulting institutions done, in addressing banking sector risks in particular? The answer is: reasonably well, though they could have done better. Capital requirements for systemically important banks were raised starting in 2014. Non-performing loans as a share of total loans fell between 2014 and 2019. The fact that no systemically important bank failed in 2020 during the COVID-19 crisis testifies to the effectiveness of the regulatory measures to strengthen their balance sheets and internal processes taken in the preceding period.[18]

The glass-not-yet-full perspective would emphasize that the Single Resolution Fund, into which ECB-supervised banks pay in order to obviate the need for taxpayer bailouts, has yet to reach its full size of 1 per cent of the deposits in ECB-supervised banks. It is scheduled to do so in 2024, but even then – and even with the addition of the European Stability Mechanism (ESM) backstop – it can be questioned whether these resources are enough. Whether the 8 per cent bail-in rule can be applied is unclear, since in practice it is likely to be applied to wholesale (interbank) depositors, who will therefore have an incentive to exit at the first sign of trouble,

[16] In practice, physically housing the monetary policy and supervisory functions in different buildings and creating a separate Financial Stability Committee largely contained such conflicts.

[17] In some cases the European Council may also be involved.

[18] Of course, it also testifies to the response of the ECB as lender and liquidity provider of last resort, which was both more rapid and more powerful than during the Global Financial Crisis or the euro crisis.

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resulting in funding instability, and worse. This points to the need to ensure that bank capital and subordinated long-term debt amount to at least 8 per cent of the balance sheet (which they presently, in general, do not, owing to their cost).

In addition, the banking union still lacks a common deposit insurance scheme, although the Commission continues to study proposals for moving in this direction. In the absence of common deposit insurance, there remains the possibility of deposit flight, in the event of stress, away from national schemes with relatively limited coverage and financial reserves. In terms of specific regulations and policies, the zero-capital charge on sovereign bonds continues to incentivize European banks to load up on the bonds of their own governments. In late 2020 and early 2021, lacking other attractive lending opportunities and enjoying an abundance of liquidity due to COVID-19, we again saw banks in the euro area periphery augment their holdings of such bonds. This raised the spectre of a 'diabolic loop', in which government debt problems created solvency problems for banks invested in government debt, together with banking sector problems that threatened further debt problems for governments on the hook for bailing out their banks.

1.5 CONCLUSION

It is customary to observe that Europe's economic and monetary union remains a work in progress. A more pertinent observation would be that Europe's economic and monetary union will *always* be a work in progress. European leaders, reflecting the input they received, not least from academics, started with a limited vision of what their union entailed. (No banking union, for instance.) They faced – and will continue to face – resistance to schemes for more fully building out the union. (No fiscal union, for instance.) The structure of the European economy will continue to evolve – it will become greener and more digital, and the economic and monetary union will have to adapt. Post-COVID-19, tourism-dependent economies will have problems. More heavily indebted governments will have problems. Growth-challenged economies and their banks will have problems. Which is to say that most of Europe, and its economic and monetary union, will have problems.

The question is whether a collection of countries bound up in an economic and monetary union has the capacity to address these challenges. Developing that capacity will require building out the economic and monetary union along dimensions where it remains incomplete, and reforming and renovating what exists. In some respects, what this implies is obvious. Build on the precedent of the Recovery Plan for Europe by further enlarging the EU's borrowing capacity. Develop revenue sources adequate for servicing and repaying EU debt. Reform and simplify the EU's maddeningly complex fiscal rules. Finish topping up the Single Resolution Fund. Create a fully funded EU-wide deposit insurance scheme.

Europe and the euro area have relied on rules – a numerical inflation target for the ECB, the numerical rules and reference values of the Stability and Growth Pact – to strengthen the democratic accountability and legitimacy of their macroeconomic policy-making institutions. But numerical rules are arbitrary, as we have seen, and arbitrary rules lack credibility and, as a result, legitimacy. They are not always faithfully respected. As social scientists have long emphasized, institutions can be erected on the basis of formal rules or informal norms and understandings. This would provide a superior basis for the operation of the euro area's policy-making institutions. But governance based on informal norms and understandings requires a high degree of trust between publics and policy makers, between the citizens of different EU Member States, and between Europe's north and south. All of which is to say that these challenges will not be met overnight.

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