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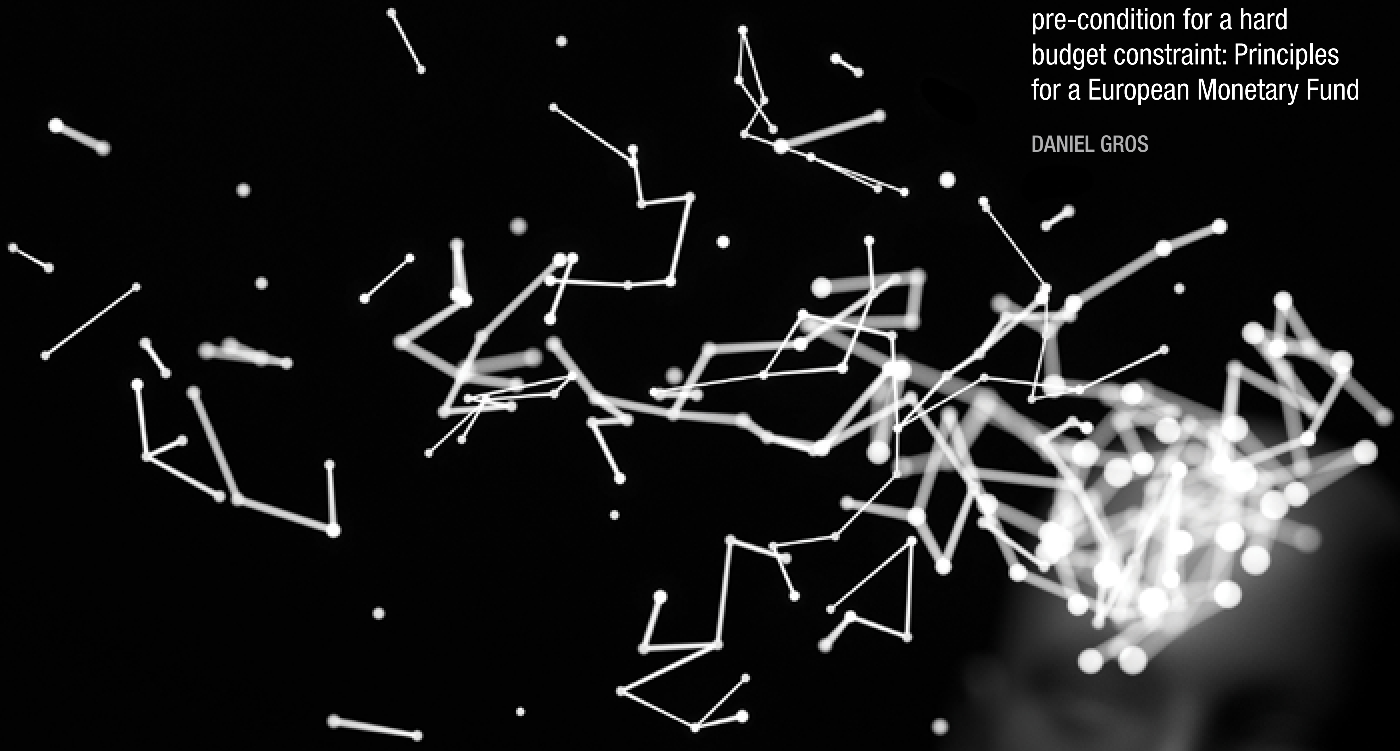
SUPERVISION

Financial stability as a pre-condition for a hard budget constraint: Principles for a European Monetary Fund

DANIEL GROS



DESIGN THINKING

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DEAR READER,

Design thinking, a collaborative, human-focused approach to problem-solving, is no longer just for the creative industries. It has become an important management trend across many industries and has been embraced by many organizations. Its results are hard to ignore. Indeed, design-driven companies regularly outperform the S&P 500 by over 200 percent.[1]

To date, the financial services industry has not led in adopting this approach. However, leaders are recognizing that important challenges, such as engaging with millennial customers, can be best addressed by using design thinking, through the methodology's exploratory approach, human focus, and bias towards action. This edition of the Journal examines the value of design thinking in financial services.

Design thinking introduces a fundamental cultural shift that places people at the heart of problem-solving, which is critical in a technology-driven environment. If the customer's real problems are not fully understood, technological solutions may fail to deliver the desired impact. In this context, design thinking offers a faster and more effective approach to innovation and strategic transformation.

The case studies and success stores in this edition showcase the true value of design thinking in the real world, and how this approach is an essential competitive tool for firms looking to outperform their peers in an increasingly innovation-driven and customer-centric future. At Mastercard, design thinking has become a part of almost all organizational initiatives, from product development, research and employee engagement to solving challenges with customers and partners. Meanwhile, at DBS Bank in Singapore, a data-informed design model has been firmly embedded into the bank's culture, enabling them to successfully move from being ranked last among peers for customer service in 2009, to being named the Best Bank in the World by Global Finance in 2018.

I hope that you enjoy the quality of the expertise and points of view on offer in this edition, and I wish you every success for the remainder of the year.

Lance Levy, **Capco CEO**

[1] http://fortune.com/2017/08/31/the-design-value-index-shows-what-design-thinking-is-worth/

FINANCIAL STABILITY AS A PRE-CONDITION FOR A HARD BUDGET CONSTRAINT: PRINCIPLES FOR A EUROPEAN MONETARY FUND

DANIEL GROS | Director, CEPS[1]

ABSTRACT

Since the financial crisis mutated into a 'euro' crisis in 2009-10, the feasibility and desirability of creating a European Monetary Fund (EMF) has been the object of serious debate in both academic and policy circles. In the meantime, the European Stability Mechanism (ESM) was created to essentially perform the functions of an EMF. It has been critical in containing the cost of the crisis, and four of its five country programs have been a success. But the case of Greece shows that one needs to be prepared for failure as well. This contribution proposes to keep the ESM's remit essentially as it is today but further empower it to impose conditions on countries receiving its financial support. Such support, however, would be limited to prevent situations arising in which the ESM would come to 'own' a country.

Within such a structure, the ESM/EMF is viewed literally as a financial stability mechanism, whose main function is to ensure that a bailout is no longer 'alternativlos', as Chancellor Angela Merkel used to say. In 2010, the rescue of Greece was presented as TINA (There Is No Alternative) because the stability of the financial system of the entire euro area appeared to be in danger. With financial stability guaranteed by the ESM/EMF in combination with the Banking Union, default becomes an alternative that should be considered dispassionately. Whether the debt of a country is sustainable can rarely be known with any certainty beforehand. Accordingly, it is proper that the Union, in the 'spirit of solidarity', initially gives a country the benefit of a doubt and provides financial support for an adjustment program. But the exposure of the Union should be limited. If the program does not work as expected, a hard budget constraint needs to be imposed, but the ESM/EMF could still be of great help as a source of bridge financing to soften the cost of default.

1. INTRODUCTION

The idea of a European Monetary Fund (EMF) has once again become fashionable. European Commission President Jean-Claude Juncker became a convert in his 2017 State of the Union speech, and the full Commission endorsed this concept later in its 'St Nicolas' package of proposals to improve the governance of the euro area. Several German policymakers subsequently also called for a transformation of the European Stability Mechanism (ESM) into an EMF. Franco-German negotiations started in this direction in 2018.

However, the various advocates of an EMF have very different ideas about its purpose and functions. This paper looks at the essential functions of an EMF and asks what changes would be needed to the ESM in order to improve the functioning of the euro area.

It will be useful to start by offering a short background of this idea. This article then turns to an examination of

[1] This contribution is based on the author's earlier publication, co-authored with Thomas Mayer, entitled "A European Monetary Fund: why and how?" CEPS Working Document No. 2017/11, CEPS, Brussels, December 2017.

the ESM's performance so far and sketches the (limited) changes that might be necessary to allow it to take on this expanded role.

2. THE HISTORY

When the first proposal for an EMF was published [Gros and Mayer (2010b)], in February 2010, Greece was still struggling on its own to avoid default. Following the revelation of a much higher government budget deficit in 2009 than had been expected earlier, 10-year government bond yields had increased from 4.5% in August 2009 to 6.1% in January 2010. Although the prospects of Greece being able to roll forward maturing debt in the market were slim, the proposal met with widespread rejection. Most people felt that the E.U. institutions would be unable to agree on financial support for a country at risk of default in view of the no-bailout clause enshrined in the Maastricht Treaty. Moreover, treaty change was dismissed as impossible, and the Gros and Mayer (2010b) proposal was seen at best as a project for the distant future.

Two months later, however, things were moving very quickly. On Sunday, May 2, 2010, Greece received its first support program, with the funds coming from bilateral loans from other Economic and Monetary Union (EMU) countries. But the move failed to calm markets, and market participants lost confidence in the liquidity and solvency of other EMU countries. This prompted the European Council (in this case the meeting of the heads of state and government of the euro area members) on the following Sunday, May 9, to create a €500 billion fund dubbed the European Financial Stability Facility (EFSF) to be able to give support to a broader group of countries.

Because the EFSF needed time to be organized, on the same day the European Central Bank (ECB) launched a government bond purchasing program, called the Securities Markets Program, with a view to bolstering the sagging prices of bonds issued by euro area governments. The EFSF was originally intended to be temporary, but the evolution of the crisis, with Portugal and Ireland needing funding (and the Greek program failing), showed that there was a need for a permanent structure to help countries in temporary financial difficulties. The EFSF was then de facto merged into the permanent ESM in late 2012. In the summer of that year, the crisis seemed to spread to two large countries, Italy and Spain. At this point, it appeared that the entire euro area was in danger of dissolving. This prompted Mario Draghi, President of the ECB, to assert that his institution would do "whatever it takes" to prevent a disintegration of the euro. Financial market tensions rapidly abated and the ECB replaced the Securities Markets Program with the Outright Monetary Transaction (OMT) Program in September 2012.

The OMT has since been widely credited with providing an indispensable safety net. But in reality, the activation of the OMT (under which the ECB would buy only short-term government bonds) is subject to the conclusion of an ESM program. The purpose of the OMT was not to substitute the ECB for the ESM, but rather to ensure the credibility of the euro area as a whole when the stability of the entire area is in danger. In such a situation, the resources of the ESM would clearly be insufficient. The International Monetary Fund (IMF) is likewise responsible for providing adjustment financing for individual countries, but its resources would not be sufficient to deal with a European financial crisis. In short, while in early 2010 an EMF seemed to be utopic, it has de facto come into existence since late 2012.

3. THE ORIGINAL IDEA

The initial blueprint [Gros and Mayer (2010b)] was, of course, very much influenced by what was then regarded as the key problem, namely the deterioration of economic conditions in Greece. We thus concentrated on five main issues, outlined below.

1. Financing mechanism: it was envisaged that capital contributions to the EMF would be based on the potential risk a country represents to the EMU. Hence, we proposed that countries breaching the Maastricht criteria would make higher contributions based on the excess of their public debt and deficit ratios above 60% and 3% of GDP, respectively. We expected that our mechanism would create a capital base of €120 billion over time, which could be leveraged to a funding capacity of at least €500 billion through borrowing.

2. Conditionality: this aspect was conceived to consist of two stages. In stage I, any EMF member could call on the capital (and cumulated interest) it had subscribed; possibly in the form of an EMF guarantee of new issues of public debt, provided its fiscal adjustment program was approved by the Eurogroup. In stage II, use of assistance from the EMF greater than the capital subscription would be dependent upon a tailor-made adjustment program supervised by the European Commission and the Eurogroup.

3. Enforcement: if a country did not live up to its commitments, new financial assistance would be cut off. A continuing breach of conditions would lead to a cut-off from structural funds and, in the event, from the euro area's money market, as the public debt of the offending country would no longer qualify as collateral for ECB funds under a repurchase agreement.

4. Orderly default: it was deemed important to recognize that default was possible, but also that the costs of default would have to be contained. If a country could not make the necessary adjustment effort, it would be in everybody's interest to cut the debt burden. To make restructuring possible, Brady bonds were held up as a useful model to follow, in which bad debt is exchanged against safe debt backed by the EMF with a haircut.[2] The size of the haircut should be such that it would bring down the debt ratio of the country in question to the Maastricht limit of 60%. In return for exchanging bad debt against safe debt, it was suggested that the EMF would acquire all claims against the defaulting country. From that time onwards, any additional funds the country received could be used only for specific purposes approved by the EMF. Other E.U. transfer payments would also be disbursed by the EMF under strict scrutiny, or they could be used to pay down the debt owed by the defaulting country to the EMF. Thus, the EMF would provide a framework for sovereign bankruptcy comparable to the Chapter 11 procedure in the U.S. for bankrupt companies that qualify for restructuring. Without such a procedure for orderly bankruptcy, the Community could be taken hostage by a country unwilling to adjust, threatening to trigger a systemic crisis if financial assistance is not forthcoming.

5. Exit: since member states of the E.U. remain sovereign countries, the original proposal acknowledged that a defaulting country could regard such intrusion into its policies by the EMF as a violation of its sovereignty and hence unacceptable. But an E(M)U member country that refused to accept the decisions of the EMF would, of course, lose access to financing from the EMF and would then have to choose between introducing capital controls or leaving the euro. At the same time, its debt towards the EMF would continue to exist and would have to be serviced anyway. If a country refused to do this and declined all cooperation, its membership of the E.U. would be called into question.[3]

This article assesses the extent to which these concerns have been addressed following a brief analysis of the experience so far.

[2] The Brady plan offered two options: i) exiting for those investors willing to take a haircut and ii) remaining invested, but in this case also providing fresh money. In the Brady plan, the reduced principal amount was partially collateralized by specially issued U.S. Treasury 30-year zero-coupon bonds purchased by the debtor country using a combination of IMF, World Bank, and the country's own foreign currency reserves. Accordingly, the debt of the defaulting country after the haircut would be collateralized by EMF guarantees.

[3] In extreme cases, it could effectively be thrown out by recourse to Article 60 of the Vienna Convention on International Treaties, or Article 7 of the Treaty of Lisbon could be invoked.

4. THE EXPERIENCE SO FAR

The track record of the five adjustment programs the ESM (and its predecessors) has undertaken is mixed. Four of the five rescue programs have already ended and could be described as a qualified success. The financing difficulties of Portugal, Ireland, and Cyprus turned out, ex-post, to be temporary (although these countries continue to depend on low interest rates due to their high levels of debt), and the recapitalization of the Spanish banking system was not so expensive. These adjustment programs have, of course, been widely criticized as being too harsh – a criticism leveled against most IMF programs. There is no need to take a stance on this issue here. What matters is that the financing of the ESM avoided three further defaults (and in the case of the small program for Spain alleviated that fear considerably). The ESM hence performed the standard function of an EMF.

The political cost of even these 'successful' cases, however, has been high. The financial assistance packages are not remembered for what they prevented (insolvency and financial collapse), but for the perceived cost of the 'austerity' in terms of incomes, employment, and output. As William Shakespeare remarked centuries ago, lending is an ungrateful business, as the lender risks losing both the friendship and his money.[4]

The one case that is almost universally regarded as a failure is that of Greece. The country obtained considerable debt relief but still needed three programs of ever-increasing amounts, and there is little sign even today of a sustained recovery. The following analysis concentrates on the Greek case and asks what features of the ESM framework might be changed to prevent similar problems in future. Before this, we examine to what extent actual developments have been in line with our earlier recommendations.

5. SIMILARITIES AND DIFFERENCES

In comparing the original blueprint [Gros and Mayer (2010b)] with what has been created so far, a considerable number of differences emerge, as presented below.

- **Financing mechanism:** Under the original scheme, financial contributions were to be based on the potential risk a country represents to EMU (e.g., its debt level), whereas contributions to the ESM are based on countries' shares of the capital of the ECB (the simple average of the respective country's shares in the total population and GDP of the euro area). Applying the ECB's capital keys to the ESM has permitted smaller countries, which are potentially more exposed to the risk of sudden stops in cross-border financial flows, to also have smaller capital shares in the ESM. This is obviously inconsistent with the key principle of insurance, namely that contributions to a common pool should not only be based on the size of the risks covered, but also on the exposure of the insured to these risks.
- **Conditionality:** Comparable to the original two-stage model for access to funds and the associated conditionality, the ESM offers several stages of access, ranging from precautionary credit lines and the purchase of bonds of a member state in primary and secondary markets to adjustment loans. In addition, the ESM can also lend to member states for the purpose of recapitalizing insolvent banks, and under certain conditions to recapitalize these entities directly. All financial assistance by the ESM comes with policy conditions specified in a memorandum of understanding agreed with the European Commission, the ECB, and (where applicable) the IMF. So far, so good. However, the involvement of the ECB in the design and monitoring of financial assistance is problematic, as it blurs the distinction between monetary and fiscal policy. Moreover, the continuing involvement of the IMF in intra-EMU affairs cannot be taken for granted, given the institution's global mandate and shareholder base. Finally, yet importantly, the European Commission's new understanding of its role as a "political commission" (as it was described by Jean-Claude Juncker following his appointment as President in October 2014) is incompatible with the job of designing and monitoring conditional financial assistance (where political aspects ought to be minimized).
- **Enforcement:** Contrary to the original idea of strict enforcement of the conditions for financial assistance, the bodies entrusted with the monitoring of assistance (the so-called Troika, consisting of the ECB, the IMF, and the European Commission) have shown considerable leniency, although the program countries have a very different impression. Their repeated non-compliance has been met with base drift or a watering down of the benchmarks, though not all of it can be attributed to policy slippage in the program countries. Some of the benchmarks were impossible to reach

[4] "Neither a borrower nor a lender be; For loan oft loses both itself and friend." (Hamlet, edited by Thompson A., and N. Taylor, Arden Shakespeare, 3rd series, London: Thomson Learning, 2006).

because, at least at the start, the underlying economic assumptions (notably on exports and growth) were much too optimistic. In the case of Greece, for example, the result was that after much delay the country reached most fiscal targets and passed most reforms. But it also became apparent that while the Greek government and parliament could be pressured to pass all the laws and regulations demanded by the creditors, it proved impossible to reform the administration, whose inefficiency and obstruction prevented in many cases the actual implementation of intended structural reforms.

- **Orderly default:** As mentioned above, Greece benefited in March 2012 from a €107 billion debt reduction, equivalent to a 53.5% haircut on the principal value of about 97% of outstanding bonds held by private-sector creditors (€197 billion).[5] Yet, the process leading up to this was anything but orderly. The announcement made in late 2011 by the French and the German leaders that some form of haircut would be considered greatly unsettled financial markets.
- **Private-sector involvement:** The EFSF supported the restructuring in a way that was similar to the earlier Brady plan. In the so-called private-sector involvement (PSI) facility, Greece offered investors one- and two-year EFSF bonds. These EFSF bonds, provided to holders of bonds under Greek law, were subsequently rolled over into longer maturities. In the bond interest facility, Greece offered EFSF six-month bills to investors in order to enable the country to repay accrued interest on outstanding Greek sovereign bonds under Greek law that were included in the PSI. The bills were also subsequently rolled over into longer maturities. The operation largely followed the pattern originally envisaged in the 2010 blueprint. Still, although the debt reduction of €107 billion amounted to 56% of nominal GDP at the end of the second quarter of 2012, the actual debt-to-GDP ratio at the end of the year was only 12 percentage points lower than before the debt reduction (160% of GDP at the end of 2012 versus 172% at the end of 2011). This situation can be explained by several factors. First of all, the headline debt reduction of €107 billion is misleading, since the approximately €60 billion of debt held by Greek banks was nominally cut in half, but the EFSF then had to immediately lend the Greek government €30 billion to recapitalize the banks. Moreover, even in 2012, the Greek government was still running a sizeable deficit, which needed to be financed from external sources. On top of this, the "sweeteners" provided to some investors in the PSI operation also increased Greece's debt vis-á-vis the EFSF. Finally, nominal GDP continued to decline, thus increasing the debt-to-GDP ratio. To achieve a more substantial debt reduction without imposing an even-greater haircut on private creditors, official creditors would have had to participate in the exercise. Their refusal to do so was one of the reasons why the exercise failed and the sacrifice of the private creditors was made in vain.
- **Make failure possible?:** At the conclusion of their crisis meeting on 21 July, 2011, the European Council members stated: "As far as our general approach to private-sector involvement in the euro area is concerned, we would like to make it clear that Greece requires an exceptional and unique solution. All other euro countries solemnly reaffirm their inflexible determination to honor fully their own individual sovereign signature and all their commitments to sustainable fiscal conditions and structural reforms."[6] This statement may have been necessary to calm markets after the announcement of Greece's partial default, but it also seemed to close the window for any further and orderly public-debt restructuring in the euro area. Fortunately, European Council Conclusions have no direct legal power. Moreover, the statement is sufficiently ambiguous. It does not say that defaults should never occur again, only that "Greece requires an exceptional and unique solution." Future defaults will certainly be different and require a different "unique solution."
- **Exit:** As would be expected, the citizens of the crisis countries regarded the intrusion into their policies by the euro-area crisis management as a violation of their sovereignty and strongly resisted such action. Greece came close to exiting EMU on two occasions. In 2012 and 2015, the idea of creating a Greek parallel currency to the euro was considered by the Greek government. And during the negotiations of a third assistance program in 2015, the German Finance Minister proposed to the Council of Ministers a temporary exit of Greece from EMU. According to press reports, apart from Greece itself, the German proposal was opposed by France, Italy, Spain, and Luxembourg. It was finally dropped at the next meeting

[5] Bonds held by official creditors, notably bonds acquired by the ECB under its Securities Markets Program, were exempted from restructuring.

[6] European Council, 2011, "Statement by the Heads of Government or Euro Area and E.U. Institutions," 21 July, https://bit.ly/2QcM1Fz

of the European Council. But the idea of exiting the euro (or of introducing a parallel currency) has not died and is still actively discussed by major political figures in Italy, for example.

In summary, both the crisis management and design of crisis-management institutions have been overshadowed by deep – one could even say "philosophical" – differences of opinion about the role of discretionary policy and contractually agreed rules [Brunnermeier et al. (2016)]. This often resulted in poor compromises, which rendered a resolute solution of the crises more difficult and left many market participants confused and skeptical about the survival of the euro. It eventually took the de facto guarantee of the ECB to use its unlimited monetary firepower to defend the euro to calm markets. Nonetheless, there is a general consensus that the intervention of the ECB can only be of a temporary nature. To put EMU on a firm footing, more comprehensive institutional changes are required.

Experience has shown that a public-debt crisis can arise from two sources: i) overspending by the government itself and ii) a financial boom-bust cycle that leads to a deep recession and forces the government to bail out its banks. Greece and Ireland represent the two archetypal cases. In principle, there are now mechanisms that should make both less likely. The provisions of the Bank Recovery and Resolution Directive (BRRD), which require a high level of capital (approximately 8% of the balance sheet) that can be 'bailed in' before public-sector support is needed, should already drastically reduce the burden of future financial crises for public finances.[7] Moreover, the common funding for bank restructuring available from the 'Single Resolution Fund' (SRF) would further reduce, perhaps even eliminate in most cases, the need for national governments to provide financial support for their banks.[8]

The Fiscal Compact mandates a continuous reduction in debt-to-GDP ratios, which should significantly diminish the probability of future public-finance excesses. Theoretically, the need for EMF assistance should likewise diminish over time. In practice, however, implementation of the Fiscal Compact has remained patchy. We, therefore, concentrate on the analysis of the first type of crisis, hoping that it will at least have become less likely, thanks to whatever limited effect the existing fiscal rules have.

6. WHAT SHOULD BE DONE DIFFERENTLY NOW?

Given that the idea of an EMF has made its way back onto the agenda for the completion of EMU, it is worth asking what should be changed in the earlier proposal with the benefit of hindsight. Here are the main points:

- **Limiting financing:** To avoid turning a crisis-assistance facility into a scheme for permanent transfers and subsequent dependency, as de facto happened in Greece, financial assistance should be limited. The IMF has recently adopted access limits for its own lending, which imply that under ordinary circumstances financial assistance is limited to five times the quota the country has in the IMF. A similar limit seems appropriate for the ESM/EMF. That being said, IMF quotas are determined somewhat differently from those of the ESM. Quotas in the ESM are the same as those in the ECB, which are an equally weighted mix of GDP and population. This corresponds closely to the most important element in the quota formula of the IMF, which assigns a weight of 50% to GDP, 30% to openness, and 15% to economic variability. The latter two factors are very much related to country size: smaller countries are typically more open and are often more exposed to shocks for the simple reason that small economies are less diversified. To capture differences in risk exposure, one might modify the overall access rule of five times the ESM quota by increasing the 'multiplier' for small countries to seven (times the ESM quota) and reducing it also to three times for the very large countries.

  Table A1 in the Appendix shows the resulting access limits, together with actual ESM funding in the five programs that were undertaken. Had this key been applied to the program countries, the assistance to Greece would have been many times larger than the actual sum the ESM provided to the country. For Spain and Cyprus, the proposed limits would not have been a constraint. The assistance to Ireland and Portugal would have been above the limit if the IMF and ESM funding were combined. If one deducts the financial assistance used for bank recapitalization, the programs in Ireland and Portugal would have been considerably smaller and the proposed access limits would not have been binding. In the case of

[7] Directive 2014/59/EU of the European Parliament and of the Council of May 15, 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms, OJ L 173, 12.6.2014.

[8] De Groen and Gros (2015) show that the SRF would have been sufficient to cover the necessary bank restructuring funding during the euro crisis, if the BRRD rules been strictly applied.

Ireland, €24 billion of the total assistance of €67.5 billion was used for bank recapitalization, leaving €43.5 billion for fiscal support (equivalent to 110% of the proposed access limit). Notably, part of the fiscal support had become necessary because the Irish government had already injected €46 billion into the banking sector. Had the government not stepped in to bail out bank creditors, it is doubtful whether Ireland would have needed financial assistance at all. In the case of Portugal, €12 billion of the total assistance of €78 billion was used for bank recapitalization, leaving €66 billion for fiscal support (106% of the proposed access limit). Thus, without the additional bank recapitalization, the proposed access limit would have allowed for providing assistance of roughly the size granted for fiscal support. As mentioned above, in future, national funding for bank recapitalization should no longer be needed given the bail-in rules of the BRRD and the SRF. The need for financial assistance to governments should be considerably reduced once the SRF becomes fully operational, which will be the case soon.

- **Conditionality:** with hindsight, the various stages of access to ESM assistance would also seem appropriate for the EMF. Responsibility for the design and monitoring of adjustment, however, would have to be assigned to a European institution that operates at arms' length from politics. The EMF would, therefore, have to develop its own capacity to monitor economic developments and implement adjustment programs (although the European Commission would continue to play a role in economic monitoring as enshrined in the EU Treaties). With access to financial assistance limited, the length of programs should also be limited to, say, three years (in line with standard IMF practice). To avoid the substitution of private debt by public debt during the program, debt service payments would need to be suspended for the duration of the adjustment program (as discussed in the Appendix). The governance structure of the ESM would seem to be appropriate to task ESM staff with program design and monitoring, and the board of directors with approval of staff decisions. The roles of the ECB, IMF, and Eurogroup would become redundant.
- **Enforcement:** enforcement of conditionality has been too weak. Hence, it is important to reiterate the need to cut off new financial assistance if a country did not live up to its commitments. A continuing breach of conditions should lead to cut-offs from structural funds and, in the event, from the euro area's money market, as the public debt of the offending country should no longer be eligible as collateral for ECB funds under a repurchase agreement (which implies that there would be capital and exchange controls). Emergency lending assistance to banks by national central banks would also be abolished.
- **Orderly default:** in line with the earlier proposal, a country would be expected to restructure its public debt if the size and length of the adjustment program is not enough to bring the country back to the market. The Brady bond model and the Greek version of it still seem appropriate, and we continue to think that the size of the haircut should be such that the debt ratio of the country in question declines to the Maastricht limit of 60%. In return for exchanging bad debt against safe debt, the EMF should receive all claims against the defaulting country. From that time onwards, any additional official funds the country received could be used only for specific purposes approved by the EMF. Other E.U. transfer payments would also be disbursed by the EMF under strict scrutiny, or they could be used to pay down the debt owed by the defaulting country to the EMF.
- **Exit:** if both financial assistance and debt restructuring failed to create financial stability and the respective country were cut off from all further assistance from the EMF, it should be able to reintroduce its own currency, exclusively or in parallel to the euro, without having to leave the E.U. The above regulation of structural funds and other E.U transfers would still apply.

The European Commission recently published its own proposal for an EMF. It differs from the earlier scheme we have examined in several respects: First, the Commission's proposal introduces a "reinforced qualified majority" voting procedure to speed up decisions, but there is no evidence that the existing voting procedure prevented timely assistance when needed. Second, the Commission intends to establish the EMF as a Community institution with strong Commission involvement instead of an intergovernmental institution. In the view of the present author, however, this is inconsistent with the character of the EMF as a non-political institution and the Commission's declared intention to be "political." Third, the Commission wants to develop new financial instruments within the EMF, but there is no scarcity of

Community financial instruments and a clear focus of the EMF on providing emergency financing for governments is decidedly preferable. Fourth, the Commission's proposal omits sovereign debt restructuring and EMU exit scheme, both of which are arguably necessary as error-correction mechanisms in a world governed by uncertainty. The Commission also wants to enable the EMF to act as a common backstop to the SRF, which would be consistent with the model of the ESM as a lender of last resort for official entities, including the SRF. In a large crisis, many assets are often underpriced, and hence it is likely that the SRF would be able to repay a loan from the EMF not only from future fees it will receive from banks but also from profits on bank assets it has acquired in the course of managing the crisis.

This revamped outline for an EMF would strengthen the incentives for establishing sound public and private finances in EMU member states and thereby reduce the reliance on the ECB to maintain the monetary union. It would also respect the principle of no bailout, which is still enshrined in the Treaty on the Functioning of the European Union, much more clearly than the present arrangements (which have been subject to numerous legal cases). Almost nothing in life is irreversible, not even entry into EMU, and defaults are a fact of life in a market economy. If one accepts this reality and prepares for the consequences, the ECB would no longer need to act as a quasi-fiscal agent and could concentrate on its original mission, namely to issue money with a stable purchasing power (or 'inner value') for the citizens of the monetary union.

> "The main purpose of an EMF should be to ensure the stability of the financial system of the euro as a whole. In this way, the cost of a default would be limited and the Union would not have to bear the cost of excessive debt accumulation by any single member."

7. CONCLUDING CONSIDERATIONS

The successful rescue programs of the ESM have shown the value of having a lender of last resort for solvent, but illiquid governments. The case of Greece has also shown the difficulty of distinguishing between solvency and liquidity.

In concluding, I would like to stress another consideration that emerges from the euro crisis. When the financial system of the entire area is in danger, governments feel that they have no choice but to bail out even governments that are very likely to be insolvent. Moreover, those same governments and the E.U. institutions will even pressure a national government with a troubled economy to accept a bailout in order to limit broader financial instability. This makes it difficult to impose conditions and increases the political costs for both creditors and debtors, as both feel that they are not acting in their own interests.

Thus, the key purpose of an EMF should be to ensure the stability of the financial system of the euro in order to limit the negative spill-overs from the potential financing difficulties of any individual member state [Tirole (2015) and Farhi and Tirole (2017)]. This is essential, not with the punitive intent of "establishing market discipline," but to ensure a proper alignment of responsibilities: the Union should not have to bear the cost of excessive debt accumulation of member states, which ultimately remain sovereign in their fiscal policies [Schäuble (2017)].

Member states will respond to proper incentives to reduce their debt to sustainable levels only if they know that the Union is not obliged to bail them out. Since financial crises spread via contagion, this implies that an EMF should have ample facilities to protect "innocent bystanders," i.e., those countries whose finances are sustainable but which might suddenly experience financing difficulties because investors withdraw from an entire group of countries. Another way in which financial crises spread is via the banking system. It is, therefore, critical that the unsustainable debt of a government does not put the Euro Area's banking system into difficulties, which is, of course, the purpose of the Banking Union. But given that the resources of the SRF are limited, it might be useful to clarify that the Union will stand behind the institutions of the Banking Union in the event that a large crisis emerges. In other words, in the existing credit money order, the Banking Union eventually needs a fiscal backstop (or the money order will need to be changed).

A financial stability mechanism is thus essential to ensure that a bailout is no longer "alternativlos," as Chancellor Angela Merkel used to say. The EMF should create the possibility to decide whether to grant financial support to a country that cannot roll over its debt because it has lost market access. It makes a world of difference whether, as in 2010, both sides feel condemned to accept a bailout package that neither likes, or whether there are alternatives. Whether the debt of a country is sustainable is rarely known with any certainty before a crisis strikes. Accordingly, it is proper that the Union, in the 'spirit of solidarity', initially gives a country the benefit of the doubt and provides financial support for an adjustment program. But the exposure of the Union should be limited. If the program goes awry, a cut in the debt must be considered dispassionately. The EMF could be of great help even if this has become unavoidable, as it could provide bridge financing and a framework for negotiations between the creditors and the debtor country.

APPENDIX: A STANDSTILL FOR DEBT SERVICE DURING THE ADJUSTMENT PROGRAM

It appears very difficult to limit ESM financing for a country with high public debt when the country's debt has not been judged unsustainable at the beginning of a program. Consider the example of a country with a debt-to-GDP ratio close to 140% and an average maturity of seven years. With this combination, about 60% of GDP would have to be refinanced over the first three years of a potential ESM program. To this burden one would almost surely have to add some current deficits, which over three years could easily add another 10% of GDP. The initial program could thus require 70% of GDP. But this would lead to a situation in which there would be little room for any haircut, if the program did not succeed in restoring growth and hence external and fiscal balance. Very short-term debt, which is almost never subject to a haircut, typically amounts to about 15% of total debt, and would in this case likely be worth 20% of GDP.

The banks of the country concerned might hold another 20% worth of GDP in bonds. This debt could not be cut either, because that would destroy the financial system of the country (and any chance of the program succeeding).

On top of this, one would have to consider any holdings of home country public debt by the national central bank. The bonds held by the central bank (acquired, for example, under the Public Sector Purchase Program of the ECB) might be formally subject to a haircut (as long as the national central bank does not hold a blocking minority). But this does not help because the national central bank is part of the national public sector and any losses it incurs would fall back on the government anyway.

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