# A European perspective on overindebtedness

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#### **Executive summary**

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THE EURO-AREA CRISIS, which nearly destroyed Europe's Economic and Monetary Union (EMU) in 2011-12, was a result of perverse incentives and inadequate institutions. The perverse incentives included excessive implicit national guarantees of domestic banks, and a lack of clarity on what would happen in case of sovereign debt distress, which was interpreted as an implicit guarantee of euro-area sovereigns by each other. Correspondingly, Europe had no institutions that could credibly declare a bank to be failing or likely to fail, manage a bank resolution process, or manage a sovereign debt restructuring. As a consequence, in the decade before the crisis, most countries' banking systems accumulated excessive risk on their balance sheets, and several member states also became overindebted.

**THE SEQUENCE OF** crisis and policy responses after mid-2007 was one of gradual, and generally very slow, recognition of the unsustainability of the euro-area policy framework. The bank-sovereign vicious circle, which had not been specifically identified as a potential contagion mechanism before the crisis, was first observed in 2009 and became widely acknowledged in the course of 2011 and early 2012. This vicious circle is now accepted by most observers as the central driver of the crisis during its most acute phase in 2011-12.

**THE POLICY RESPONSE** has developed in accordance with this evolving analysis. The most impactful initiative has been the initiation of a banking union in mid-2012, but this remains incomplete and needs strengthening. While many features of the euro-area experience are unique, the role of incentives and the gradual introduction of market discipline into the policy framework hold useful lessons for other jurisdictions.



### Introduction

The past decade in Europe provides a treasure trove for observers of overindebtedness and deleveraging. From Iceland to Turkey, from the City of London to the Baltics, and of course in the euro area, there have been numerous build-ups of uncontrolled leverage, official forbearance over unsustainable exposures and painful adjustment. This included the Greek sovereign debt restructuring of March 2012, which was a credit event according to the International Swaps and Derivatives Association (ISDA) and, as such, the first case of sovereign default in a so-called advanced economy since the second world war.

We focus on the experience of the euro-area crisis, with an emphasis on issues of implicit guarantees, credit risk management and the connections between banks and governments. In our definition, the euro-area crisis includes the whole sequence that started with turmoil in the financial sector from mid-2007, initially triggered by adverse developments in the US housing markets to which some euro-area banks were significantly exposed, then reverberated through various mechanisms to encompass sovereign loss of market access, first in Greece in late 2009/early 2010 and then in other European Union countries. While we are aware of the complexity of individual episodes, we view initiatives taken by political leaders and monetary policymakers in the summer of 2012 as the key turning point that stopped a dynamic of financial dislocation and started a cycle of stabilisation and gradual repair, which is still unfinished at the time of writing.

# 1 The structural roots of the euro-area crisis

The roots of the euro-area crisis are to be found in the 'great moderation' years that preceded the start of the turmoil, which may be conventionally set as late July-early August 2007 when two real-estate-focused hedge funds backed by Bear Stearns collapsed, the mid-sized German bank IKB was rescued in a hurry and the markets for subprime-mortgage-backed securities froze, in turn prompting extraordinary liquidity intervention by the European Central Bank (ECB) soon followed by the US Federal Reserve.

Common to the US and the European crises was a monetary and regulatory environment involving easy money and neglect of emerging financial sector risks. At the same time, the euro-area crisis marked the end of a cross-border financial cycle that was specific to the euro area. This cycle followed a pattern regularly observed since the 1820s, involving capital outflows from the European financial core to 'peripheries' – in the Americas, Australia, southern Africa or Eastern or Southern Europe – followed by risk accumulation, and eventually a bust and sudden reversal of flows (Suter, 1992; Sturzenegger and Zettelmeyer, 2007).

In the nineteenth and twentieth centuries, examples of the 'good news' that triggered initial outflows included independence, the end of wars, terms-of-trade shocks favourable to the periphery and economic and political reform. The euro-area cycle began with a variant of the latter: the elimination of exchange rate risk and the expectation of closer economic integration and better macroeconomic management under EMU, following the adoption of the euro in 1999. 'Bad news' triggering the reversal of capital flows has historically included negative terms-of-trade shocks, adverse economic or political events in the periphery, recessions in the core countries providing the capital or sharp rises in international borrowing costs. The 'bad news' that triggered the euro-area crisis was initially the US subprime crisis and the ensuing market disruption, and later the discovery of greater-than-expected fiscal and economic problems in the periphery (particularly in Greece).

The causes of the build-up of excessive risk in the euro area were parallel, but not identical, to those observed in the United States. In the US, the risk accumulation happened primarily in the domestic residential property market, based on the mistaken belief that real

estate downturns were regional in nature and couldn't happen at the same time across the nation. This risk was channelled through unsupervised (or in some cases poorly supervised) nonbank intermediaries, later loosely referred to as the 'shadow banking system', whose failure in turn threatened the viability of a range of financial institutions, the largest of which could be assumed to be 'too big to fail'. By contrast, hundreds of small and mid-sized banks failed in an orderly manner as a consequence of the crisis, and were handled through the receivership process of the Federal Deposit Insurance Corporation (FDIC)¹. Despite unprecedented financial intervention by the federal government in 2008-09, the credibility of the deposit insurance system was not questioned².

In the euro area, the take-up of risk was equally pervasive in banks and governments, with fewer disciplining mechanisms for either. The euro area also relied comparatively less on domestic financial innovation. Instead, the main mechanisms driving excessive risk taking appear to have been: (1) a generalised miscalculation of the extent and type of crises that would be possible under EMU, and (2) implicit guarantees, particularly in the banking sector.

Sovereign debt yields converged dramatically with the start of EMU. The compression of spreads over the reference 10-year German sovereign bond partly reflected the perceived reduction of risks from the elimination of exchange rate risk and expected improvements in macroeconomic management (Figure 1). At the same time, the compression of spreads went beyond what can be attributed to genuine risk reduction. This can be interpreted as a collective failure to properly assess the nature of future crises and the scope for containing them through collective financial support. In particular, market participants and public policymakers overestimated the possibilities of cross-border assistance in the event of a sovereign debt crisis in one of the member states.

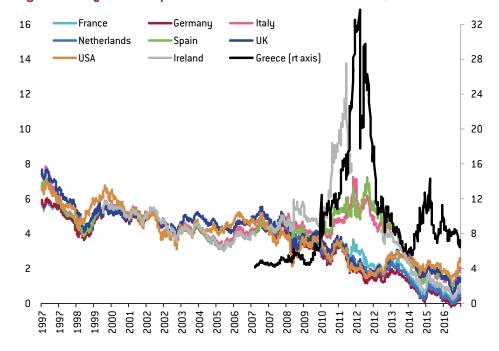


Figure 1: Ten-year bond spreads of selected euro-area countries, 1995-2016

Source: Bruegel, Bloomberg. Note: Bond spreads calculated as difference between 10-year government benchmark bond in country shown and 10-year German government benchmark bond. Data for Greece begin in March 2007.

<sup>1</sup> The largest of these, Washington Mutual, had around \$300 billion in total assets.

<sup>2</sup> The sovereign rating of the US federal government was downgraded several years later, in August 2011, by Standard & Poor's, but this was motivated by political deadlock in Washington, not by the direct impact of the financial crisis or its management and resolution by federal authorities.

A striking suggestion of implicit guarantee was the comment in February 2009 by Peer Steinbrück, then Germany's federal finance minister, that "if one eurozone [country] gets into trouble, then collectively we will have to be helpful"3. We interpret this as a signal that generous liquidity assistance could be provided in the event of a euro-area member state losing sovereign market access. This signalling followed consultations between the French and German governments together with EU authorities in the early weeks of 2009, when Greece was already understood to be vulnerable, and Ireland was under intensive observation by the International Monetary Fund (IMF) following its extension of comprehensive guarantees to the domestic banking sector in October 2008 (see Véron, 2016). At that time, the market and official consensus of the pre-crisis years, as revealed by reactions in the early days of the crisis, does not seem to have explored how crises would be managed if a country's loss of sovereign market access were found to denote insolvency as opposed to illiquidity<sup>4</sup>.

A similar unwillingness to consider what would happen in the event of an insolvency can be observed with respect to banks. The official stance in many euro-area countries<sup>5</sup> was essentially to pretend that domestic banks would never fail, so instruments of liquidity support would always be sufficient to resolve crises. This official delusion reflected deep and multifaceted links between the national banking sectors and domestic political systems. To summarise a complex picture, the details of which vary considerably in different member states, such links responded to two drivers: 'financial repression', understood as the influence of public authorities over banks to direct lending towards preferred borrowers (including privileged enterprises, sectors, and/or themselves as sovereign or sub-sovereign issuers); and 'banking nationalism', the propensity of public authorities to protect and promote the interests of national champion banks headquartered in their jurisdictions. These patterns were echoed in the structure of the banking systems in euro-area countries, in which publicly listed banks with dispersed ownership are much less dominant than in the United States, Canada, Australia or the United Kingdom, and most banks are owned by the public sector or cooperatives, or controlled by an influential minority or majority shareholder or shareholder group, making them to varying degrees receptive to direct political intervention (Véron, 2017a). The flipside of financial repression, banking nationalism and political influence through governance and ownership structures, was a perception of pervasive public guarantees. As the next section illustrates, this perception of banks being guaranteed was largely accurate (unlike that applying to euro-area member states) in the first five years of the crisis.

In sum, the build-up of private and public debt in the euro area prior to 2007 can be attributed in part to overestimation of the genuine safety of the system – with a blind eye turned towards the possibility of solvency crises – and in part to implicit guarantees. The patterns

- 3 Christian Reiermann, 'A Test for Europe's Common Currency: Support for Wobbly Euro Economies,' Spiegel Online, 20 February 2009, available at www.spiegel.de/international/europe/a-test-for-europe-s-common-currency-support-for-wobbly-euro-economies-a-608985.html (accessed on 17 May 2017). The article mentions that "Greece, Ireland and Italy, especially, are seen as wobbling." It also refers to dissenting voices in the German debate, quoting Jürgen Stark who at the time was a member of the ECB's Executive Board.
- 4 Importantly, we don't view this collective error of judgment as having been about the euro-area member states' fiscal sustainability assessment *per se*. In particular, the weakness of Greek sovereign creditworthiness, and the egregious unreliability of its government financial statistics, were already well known before 2009 and didn't prevent Greek sovereign spreads over German 10-year debt from being as low as a few dozen basis points in early 2007.
- 5 The exception to this general observation is Finland, which was hit by a severe financial crisis in the early 1990s, together with Denmark and Sweden (the latter are EU member states but not in the euro area). Finnish policymakers were thus more realistic about actual options in the event of financial turmoil. It is presumably not coincidental that forceful supervision saved Finland and Sweden from experiencing almost any bank failure in the last decade (the only exception we identified was Sweden's small Carnegie Investment Bank, nationalised in November 2008), and that Denmark was unique among EU countries in managing the orderly closure of a number of small banks (eg Amagerbanken and Fjordbank Mors in 2010, Andelskassen JAK Slagelse in 2015) without any recourse to taxpayers' money. (An earlier rescue, of Roskilde Bank in 2008, had guaranteed senior bonds but imposed losses on shareholders and subordinated debt holders).

of risk build-up varied greatly in different countries and would be too long to describe in detail here. Importantly, not all segments of the economy were subject to such moral hazard. Borrowing by large nonfinancial corporations, for example, or by targets of leveraged private equity investments, does not appear to have been excessive even in hindsight. It is particularly striking that private equity and hedge funds were widely viewed in the years immediately before the crisis as major sources of systemic risk but turned out not to be, while banks and governments that had been perceived as safe became the main disrupters.

# 2 Crisis sequence and policy responses

This section selectively summarises the course of the euro-area crisis, from its start in mid-2007 to the turning point of mid-2012, to the present<sup>6</sup>. As previously mentioned, the initial shock was to the banking system through its high exposure to the US subprime property market. This particularly affected a number of French, German and other banks and the funds or other off-balance-sheet vehicles that they implicitly or explicitly guaranteed<sup>7</sup>. Subsequent turmoil in segments of wholesale capital markets (such as those for residential asset-based securities) severely disturbed some banks' funding conditions. The resulting disruption led in particular to the early collapse of German banks IKB and Sachsen LB, both of which were fully guaranteed and rescued by German public authorities in the summer of 2007, and severe subsequent problems at other German banks such as WestLB and Hypo Real Estate.

After the crisis escalated in September 2008 – including, in the United States, the placement into conservatorship of Fannie Mae and Freddie Mac, the bankruptcy of Lehman Brothers, and the rescue of AIG – EU countries were compelled to signal that while the shareholders of weak banks might incur losses, there would be no failure and specifically no imposition of losses on banks' creditors, no matter how small the bank or how subordinated the creditor. In some cases, the relevant government had to take majority or full ownership of weak banks, including Allied Irish Banks and Anglo Irish Bank in Ireland; Fortis Bank in Belgium, Luxembourg (almost immediately sold to BNP Paribas) and the Netherlands (renamed ABN AMRO); Dexia (jointly acquired by the French and Belgian governments); and Hypo Real Estate in Germany. In some of these cases, such as Dexia, governments even paid for the bank's shares at a price that was far from negligible. Furthermore, governments extended guarantees to banks, with those in Ireland being particularly comprehensive.

Nevertheless, it took several years for analysts, policymakers and the broader public in the euro area to come to a more realistic consensus assessment of the extent of solvency challenges in the banking system, of the implications for sovereign creditworthiness and of the

- 6 Compared to the United States or even the United Kingdom, there has been a relative scarcity of public in-depth analysis of the euro-area crisis. Relevant references include Irwin (2013) and Bastasin (2015) for investigative journalism, Pisani-Ferry (2014) and Sinn (2014) for contrasting scholarly perspectives, and Smart (2017) for an analysis that puts appropriate emphasis on what we view as the central driver of the euro-area crisis, namely the bank-sover-eign vicious circle.
- 7 See Bayoumi (2017) for an extensive account.
- 8 For example, the declaration adopted at the euro-area summit on 12 October 2008, stated that "Governments remain committed to support the financial system and therefore to avoid the failure of relevant financial institutions, through appropriate means including recapitalisation. In doing so, we will be watchful regarding the interests of taxpayers and ensure that existing shareholders and management bear the due consequences of the intervention." Note the absence of mention of banks' creditors among the parties that might "bear the consequences." The same declaration endorsed the extension by each government of guarantees for newly issued bank debt "for an interim period and on appropriate commercial terms," as well as a commitment by each member state to "make available to financial institutions Tier 1 capital, e.g., by acquiring preferred shares or other instruments including non-dilutive ones" (Council of the European Union 2008).

actual options available in the event of sovereign insolvency of one of the area's members. In the meantime, two key mechanisms fuelled the general deterioration of financial conditions across an increasing number of euro-area countries.

First, the partial and conditional nature of the area's implicit safety net for government debt was gradually revealed, leading to a sharp increase in, and differentiation between, sovereign bond spreads. The crisis in Greece, triggered by the announcement of much higher than expected fiscal deficits in late 2009, was met by the provision of significant financial assistance in May 2010. But this came with onerous conditions in terms of fiscal and structural adjustment. Furthermore, German and French political leaders soon indicated that future official assistance to sovereigns would need to be accompanied by "arrangements for adequate private sector involvement" to ensure that private sector bondholders would share some of the losses of sovereign insolvency (Weder di Mauro and Zettelmeyer, 2017). The intention of this was to ensure that official assistance – and particularly the creation of permanent assistance mechanisms – did not give rise to additional implicit guarantees. However, it precipitated Ireland's, and a few months later Portugal's, loss of sovereign market access.

Second, it became increasingly apparent that the euro-area governments' approach to banking crisis management, as revealed in 2007 and especially in the second half of 2008, created massive contingent liabilities for the relevant sovereigns, and that conversely, a loss of sovereign creditworthiness had a direct impact on a country's banking system, both because of the corresponding weakening of public guarantees and the high level of direct exposure of banks to their home country's sovereign credit. This resulted in a vicious circle (sometimes referred to as the 'doom loop') between banking sector and sovereign vulnerabilities, first identified in the euro-area context by IMF staff economists who observed it in Ireland in early 2009 (Mody, 2009; see also Gerlach, Schulz and Wolff, 2010). But it took two more years for this to be widely accepted by analysts, and additional time to be recognised by public policy-makers (Véron, 2016).

The widespread denial of the depth of the banking system problems, largely (though far from exclusively) as a consequence of banking nationalism, contributed to accelerating dislocation. Following the announcements of assistance programmes for Greece (May 2010), Ireland (November 2010) and Portugal (May 2011), contagion spread rapidly to Italy (which, under then prime minister Silvio Berlusconi, was perceived as lacking fiscal restraint and the willingness to carry out structural reforms), Spain (which faced a sharp real-estate downturn) and France (where banks were very large and dependent on access to wholesale funding in dollars, a market in which they started to experience serious difficulties in August-September 2011).

By late 2011 it had become obvious that the euro area's course was unsustainable and would lead to a disorderly breakup unless major initiatives were undertaken to break the bank-sovereign vicious circle. Plans for 'fiscal union', or the pooling at the euro-area level of at least some instruments of fiscal policy, were mooted but came to nothing substantial. The announcement in December 2011 of a 'fiscal compact', by which member states committed to various mechanisms for fiscal discipline, did not stem the financial deterioration, in part because investors (correctly, as it turned out) doubted that these mechanisms would be enforceable and, even more importantly, because it contained nothing to break the ongoing bank-sovereign vicious circle. In the absence of more palatable options, member states in late June 2012 adopted an alternative plan for a 'banking union', by which banking-sector policy would be pooled at the euro-area level, starting with the transfer of bank supervisory authority from national supervisors to the ECB. This very strong statement of purpose in turn allowed the ECB to commit in the summer of 2012 to unlimited supplies of sovereign bonds of countries under stress, provided they accepted conditions of adjustment, which eventu-

<sup>9</sup> After a transitional phase, these took the form of the European Stability Mechanism (ESM), a euro area fund with a potential lending capacity of €500 billion, established in 2012 in Luxembourg.

ally reversed the disorderly increase in sovereign spreads and opened a new cycle of gradual stabilisation of sovereign market conditions<sup>10</sup>.

Despite localised turmoil, in Cyprus in 2013 and in Greece again in 2015 (following a change of government), this approach has been broadly successful. Spain received financial assistance in July 2012 to help the recapitalisation of its banking system and has not lost sovereign market access again. Ireland, Portugal and later Cyprus regained sovereign market access and exited financial assistance in 2013, 2014 and 2016 respectively<sup>11</sup>. The ECB assumed its supervisory authority in November 2014 and has been broadly effective at driving the gradual repair of the euro area's banking system. The last significant pockets of fragility, in Portugal and Italy, are well on their way to being addressed at the time of writing. The adoption of a new framework for banking crisis management and resolution, known as the Bank Recovery and Resolution Directive (BRRD) and broadly based on the US model of FDIC-led receivership, has been accompanied by a growing number of cases of losses imposed on junior creditors in bank rescues<sup>12</sup>. However, the extension of this framework to failing banks' senior creditors remains difficult and controversial, and actual cases of senior creditor losses have (with the exception of Denmark – see note 5) been few and messy (see European Parliament, 2016; World Bank, 2016; Philippon and Salord, 2017)<sup>13</sup>.

# 3 Current euro-area policy debates, assessment and prospects

The actions briefly reviewed in the previous section have gone some way to mitigate the linkages between banks and sovereigns in the euro area, and to correspondingly reduce implicit guarantees and the associated moral hazard, but have stopped well short of eliminating them. To name a few significant items of unfinished business: all deposit insurance remains at the national level, and a proposal made in November 2015 by the European Commission to gradually migrate toward a fully mutualised euro-area deposit insurance system by 2024 has made no progress so far toward legislative adoption; the BRRD resolution model remains partly untested, as none of the significant cases of bank resolution or liquidation since that legislation fully entered into force in early 2016 have involved senior bond bail-in; the establishment of a euro-area bank resolution fund to absorb any residual losses remains a work in progress<sup>14</sup>; and many euro-area banks still hold very large portfolios of home-country sovereign debt.

As a result, though steps have been made in the right direction, the bank-sovereign vicious circle has been mitigated but far from eliminated in the euro area. Many euro-area banks

- 10 The ECB intervention was memorably signalled in late July 2012 by its president's commitment to doing "whatever it takes to preserve the euro, within our mandate," and was formalised as the Outright Monetary Transactions (OMT) programme in September. Ironically, the announcement of OMT was sufficient to dramatically alter market perceptions, and the programme has so far not been triggered.
- 11 Cyprus had to impose capital controls in 2013, but these were fully lifted in April 2015. Greece, however, still has capital controls from its crisis episode of mid-2015.
- 12 Losses were imposed on subordinated bank creditors in countries including Ireland (eg Allied Irish Banks), Italy (Banca Etruria, Banca Marche, CariChieti, Carife, Banca Popolare di Vicenza, Veneto Banca, Monte dei Paschi di Siena), the Netherlands (SNS Reaal), Portugal (BANIF), Slovenia (eg NKBM, NLB, Abanka) and Spain (eg Bankia, Banco Mare Nostrum, Banco Popular).
- 13 These include Anglo Irish Bank in Ireland, Laiki Bank and Bank of Cyprus in Cyprus, Banco Espírito Santo in Portugal. and Hypo Alpe Adria/HETA in Austria.
- 14 The so-called Single Resolution Fund (SRF) was established in January 2016 and entrusted to the Single Resolution Board, the new euro-area resolution authority created as part of the banking union agenda. As its name does not indicate, however, the SRF is actually a collection of national and euro-area funds (known as 'compartments') that are currently scheduled to be fully merged ('mutualised') by 2024.

remain highly exposed to national sovereigns, and individual member states could still be exposed to significant fiscal costs in case of future widespread banking sector difficulties.

More subtle forms of linkages between banks and national public policy have also been exposed by crisis developments. For example, in Germany, several banks' risky shipping loans have been backed by pension fund investors through tax-preferred 'KG funds', delaying their overdue restructuring<sup>15</sup>; in Italy, public authorities have tolerated the sale by regional banks of their own risky equity and debt instruments to their retail clients<sup>16</sup>. Such idiosyncrasies have the effect of making bank restructuring highly contentious in local political environments, and as a consequence have delayed or deterred proper crisis management and resolution.

Even assuming continued economic recovery combined with stable, relatively low real interest rates in the euro area, Europe should not miss the opportunity to leverage the recent painful experience to sever the remaining bank-sovereign linkages and make the euro-area sovereign and banking framework more resilient to future shocks. Specifically, the aim should be for each member state to be able to weather a sovereign debt crisis (possibly even a sovereign credit event) without triggering a bank run or the imposition of capital controls; and conversely, to be able to manage and resolve a systemic banking crisis without losing sovereign debt market access. In our assessment, this aim can be reached within the framework of the current EU treaties, and without a full-fledged fiscal union that would entail an autonomous ability to tax, spend and borrow at the European level. A corresponding policy programme might include:

- Greater transparency of government (national and subnational) financial statistics, through a reform of the EU public-sector accounting and auditing framework (currently entrusted to EUROSTAT) and enhanced protection of the independence of national government statisticians<sup>17</sup>.
- A new regulatory regime involving gradually increased capital charges on banks' sovereign debt exposures (or sovereign exposure curbs), to reduce the current home bias in banks' euro-area sovereign debt portfolios.
- Regulatory incentives to replace such portfolios by diversified portfolios or a newly created 'safe asset' that is, an asset that continues to perform even if there is a default by one or several sovereigns in the euro area, including the home-country sovereign (see Zettelmeyer, 2017, for an overview). This could be debt issued by a senior public intermediary that buys national sovereign bonds at face value and passes on the cost of issuance to its debtors ('E-bonds', see Monti, 2010); debt issued by a future euro-area budget ('stability bonds', see Ubide, 2015); the senior tranche of tranched national sovereign debt (Wendorff and Mahle, 2015); or the senior tranche of euro-area-level sovereign bond backed securities (Brunnermeier, et al, 2017).
- Enactment of a European Deposit Insurance Scheme (EDIS)<sup>18</sup>.
- Modification of the ESM's intervention guidelines so that it could participate in precautionary recapitalisations of solvent but fragile banks<sup>19</sup>.
- An explicit backstop (through an open credit line) by the ESM to the euro area's Single
  Resolution Fund and to the still-to-be-created European Deposit Insurance Fund as part
  of the implementation of EDIS.

<sup>15</sup> See, eg Bruce Barnard, 'Ship Finance on Life Support', Journal of Commerce, 28 February 2013.

<sup>16</sup> See, eg Rachel Sanderson, 'Once-thriving Veneto becomes heart of Italy's banking crisis', Financial Times, 24 November 2016.

<sup>17</sup> The ongoing prosecution of a former head of the Greek national statistical office tragically demonstrates the inadequacy of the current framework in this respect. See, eg Clive Crook, 'The Scandalous Plight of A Greek Whistleblower,' Bloomberg Businessweek, 14 August 2017.

<sup>18</sup> The authors differ on whether this should be enacted essentially as proposed by the European Commission in November 2015, or according to a different design that would conserve a national level of insurance.

 $<sup>19~\,</sup>$  This matter is explored in depth in Véron (2017b).

- Further harmonisation of the bank supervisory rulebook to phase out all existing options and national discretions that create distortions in the prudential supervision of euro-area banks under the oversight of the ECB.
- Gradual harmonisation of the frameworks for bank insolvencies in the euro area, to eventually reach the objective of a genuine single resolution mechanism<sup>20</sup>.
- Mandatory use of the International Financial Reporting Standards (IFRS) as accounting requirements applicable to all banks in the European Union including small unlisted ones, in line with international best practice<sup>21</sup>.
- Improvements to bond contracts and/or EU or euro-area legal frameworks, to reduce the power of 'holdouts' and to make sovereign debt restructuring more orderly and predictable.
- The creation of an explicit 'exceptional access policy' for the ESM, along the lines of the IMF's, to prevent it from lending to sovereigns with unsustainable debts, unless this is accompanied by a debt restructuring (Weder di Mauro and Zettelmeyer, 2017).

This list is not meant to be exhaustive, and other initiatives could be envisaged, particularly on the banking sector's tax and auditing frameworks. Of course, reforms should be phased in over time. They also need to be carefully coordinated and communicated to prevent market disruptions, and must include appropriate transitional arrangements. In particular, 'discipline-enhancing' reforms, such as tougher regulatory treatment of sovereign exposures or a strong ESM commitment not to bail out unambiguously insolvent countries without accompanying sovereign debt restructuring, need to be balanced by 'insurance-enhancing' reforms, such as the creation of a European safe asset, the creation of a European Deposit Insurance Fund and agreement on the ESM as a backstop.

Even under the most optimistic assumptions, it will take years to enact and implement all the items mentioned above. Nevertheless, we view this programme as realistic and achievable if euro-area leaders are prepared to keep to their stated aim of breaking the vicious circle between banks and sovereigns. In the meantime, the euro area will need to rely on an incomplete financial architecture to contain emerging risks, including risks arising from gradually rising interest rates<sup>22</sup>.

# 4 Conclusion

This Policy Contribution summarises and synthesises multifaceted arguments about the build-up of excessive indebtedness in the run-up to the euro-area crisis, the treatment of that crisis in the past decade of turmoil and possible reforms to make the euro-area framework more resilient. Both the crisis management framework and the broader reform programme are still works in progress, and many of their aspects are highly contentious in the euro area.

- 20 Bank resolution, in Europe as elsewhere, is defined in law as a preferable alternative to court-ordered insolvency. Thus, the aim of a 'single resolution mechanism' in the euro area can be fully reached only if the bank insolvency frameworks of different member states are identical, which is far from the case now. The administrative liquidation in June 2017 of Italy's Banca Popolare di Vicenza and Veneto Banca has highlighted the importance of this issue to European policymakers.
- 21 Currently, IFRS are mandatory for all listed banks and for unlisted banks in some but not all euro-area member states
- 22 The biggest concern in this regard is Italy, because of banking system weaknesses, many years of low growth and a high level of sovereign debt. This said, Blanchard and Zettelmeyer (2017) argue that assuming that the bank cleanup continues, and barring a political shock that brings to power parties determined to force an exit from the euro area loss of market access in Italy could be contained with without a sovereign debt restructuring, using existing instruments such as the ESM and the OMT.

Nevertheless, we reckon that three important policy lessons stand out from this experience, which are also of possible value to jurisdictions outside of Europe.

- First, the paramount importance of market discipline and, related to it, the need to minimise uncertainties about implicit guarantee mechanisms to the maximum practical extent. The fuzziness of the framework to support member states in case of loss of sovereign market access has been a central feature of the euro-area crisis, as has an initially excessive implicit (and in late 2008, explicit) commitment by governments to guarantee the liabilities of failing euro-area banks. Related to this objective is the need to dramatically improve the transparency of banks and of national and subnational governments vis-à-vis market investors, an area in which limited and altogether insufficient progress has been made since the start of the euro-area crisis.
- Second, the case for a more diversified financial system and reduction of its over-whelming reliance on banks, thus making it easier to weather systemic banking crises while dispersing the burden of associated losses. The contrast between the United States' market-based system and the euro area's bank-based one goes a long way to explain why the United States was able to restore its financial system's core functions within about two years following the initial shock of mid-2007, while the equivalent return to normality has taken about a decade in the euro area. The current EU reform agenda, known as Capital Markets Union, illustrates the widespread recognition of this need following the crisis, but much remains to be done to translate this intent into policy reality.
- Third is the challenge of creating an incentive-compatible framework to organise the relationship between structurally interdependent fiscal entities. In the case of the euro area, insolvent countries could create large problems for each other, not least because of their linkages through the banking sector. Beyond insufficient market discipline and questionable enforceability, a core reason for the failure of the euro-area Stability and Growth Pact is that it ignored the potential fiscal consequences of private sector debts. The lesson here is that a construct based on fiscal rules cannot work unless the direct links between banks and governments are fully severed at all levels but the highest (and even there, such links should be reduced by involving creditors in loss sharing). Even so, it remains to be seen whether a euro-area framework with full banking union (ie beyond the current hybrid) but no fiscal union (implying a euro-area-level ability to tax, spend and borrow) can be resilient and sustainable over the long term.

# References

Bastasin, Carlo (2015) Saving Europe: Anatomy of a Dream, Washington: Brookings Institution

Bayoumi, Tamim (2017) *Unfinished Business: The Unexplored Causes of the Financial Crisis and the Lessons Yet to Be Learnt*, New Haven: Yale University Press, forthcoming

Blanchard, Olivier, and Jeromin Zettelmeyer (2017) 'Will Rising Interest Rates Lead to Fiscal Crises?' *PIIE Policy Brief* 17-27, Washington: Peterson Institute for International Economics

Brunnermeier, Markus K., Sam Langfield, Marco Pagano, Ricardo Reis, Stijn Van Nieuwerburg and Dimitri Vayanos (2017) 'ESBies: Safety in the Tranches,' *Economic Policy*, forthcoming

Council of the European Union (2008) 'Summit of the Euro Area Countries: Declaration on a Concerted European Action Plan of the Euro Area Countries', 14239/08, Brussels, October

European Parliament (2016) 'At a Glance: The Implementation of Bail-In in Recent Resolution and State Aid Cases', Directorate-General for Internal Policies, Economic Governance Support Unit

- Gerlach, Stefan, Alexander Schulz and Guntram B. Wolff (2010) 'Banking and Sovereign Risk in the Euro Area,' CEPR Discussion Paper DP7833
- Irwin, Neil (2013) The Alchemists: Three Central Bankers and a World on Fire, New York: Penguin Press
- Mody, Ashoka (2009) 'From Bear Stearns to Anglo Irish: How Eurozone Sovereign Spreads Related to Financial Sector Vulnerability', *IMF Working Paper* WP/09/108. Washington: International Monetary Fund
- Monti, Mario (2010) A New Strategy for the Single Market. Report to the President of the European Commission, May
- Pisani-Ferry, Jean (2014) The Euro Crisis and Its Aftermath, Oxford: Oxford University Press
- Philippon, Thomas, and Aude Salord (2017) 'Bail-ins and Bank Resolution in Europe: A Progress Report', Geneva Reports on the World Economy Special Report 4, Geneva: International Center for Monetary and Banking Studies/Centre for Economic Policy Research
- Sinn, Hans-Werner (2014) The Euro Trap, Oxford: Oxford University Press
- Smart, Christopher (2017) "The Financial Education of the Eurozone," Associate Working Paper Series
  No. 69, Mossavar-Rahmani Center for Business and Government, Cambridge MA: Harvard Kennedy
  School
- Sturzenegger, Federico, and Jeromin Zettelmeyer (2007) *Debt Defaults and Lessons from a Decade of Crises*, Cambridge MA: MIT Press
- Suter, Christian (1992) Debt Cycles in the World Economy: Foreign Loans, Financial Crises, and Debt Settlements, 1820–1990, San Francisco: Westview Press
- Ubide, Angel (2015) 'Stability Bonds for the Euro Area', *Policy Brief* PB 15-19, Peterson Institute for International Economics
- Véron, Nicolas (2016) "The IMF's Role in the Euro Area Crisis: Financial Sector Aspects," *IEO Background Paper* BP/16-02/10, Washington: Independent Evaluation Office of the International Monetary Fund
- Véron, Nicolas (2017a) 'The governance and ownership of significant euro-area banks', Policy Contribution 15/2017, Bruegel
- Véron, Nicolas (2017b) 'Precautionary recapitalisation: time for a review?' *Policy Contribution* 21/2017, Bruegel
- Weder di Mauro, Beatrice, and Jeromin Zettelmeyer (2017) 'The New Global Financial Safety Net: Struggling for Coherent Governance in a Multipolar System,' *CIGI Essays in International Finance* 4
- Wendorff, Karsten, and Alexander Mahle (2015) 'Staatsanleihen neu ausgestalten für eine stabilitätsorientierte Währungsunion', *Wirtschaftsdienst* 95 (9)
- World Bank (2016) Bank Resolution and "Bail-in" in the EU: Selected Case Studies Pre and Post BRRD, Vienna: Financial Sector Advisory Center
- Zettelmeyer, Jeromin (2017) 'Managing Deep Debt Crises in the Euro Area: Towards a Feasible Regime,' mimeo available on the PIIE website, June