

Polio or Premeditated Murder: The Curious Case of the Eurozone's Banking Union

By Marko Malovic¹

Abstract: *In this paper, we put under scrutiny the blueprint of the Eurozone's banking union in trying to confront and contrast the shortcomings of the currency union and malaise of the euro-crisis at hand with the aims, instruments and scope of the banking union itself. After investigating direction of causality between the weak banking sectors and the weak sovereign (public) finances, we go on to rectify both the objectives and design of the Eurozone's banking union (EBU). This paper argues that EBU has been deployed to deal with wrong problems equipped with ill-suited tools, which accounts for its early paralysis. However, the fact that leading members of the Eurozone hastily passed national legislation which exempts their strategically important banks from the outreach of the European Banking Authority they themselves have just established, casts doubt that the aforementioned financial polio may disguise something much more sinister coming up. One way or the other, we claim that the EBU stands no chance whatsoever without further "federalisation" of the E(M)U, although its functional survival may be arranged both with and without Germany's continued participation.*

Key Words: *EBU, twin crisis, EBA, ECB, too-systemic-to-fail, mutual deposit insurance scheme, SRM, ESM, Eurozone's Brady bonds, Germany.*

JEL Classification: *F36, F42, G01, G21, G28*

"For all its romantic attractiveness, national heritages and cultural identities – Europe remains a banking backwater and bank regulator's nightmare." –Michael Burda

"Banks are international in life but national in death" – Sir Mervyn King

1. Introduction

Access to finance is a critical precondition for growth. In E(M)U, and especially during recessions when profit retention or raising new equity proved to be of limited applicability, borrowing from banks has turned out to be disturbingly dominant source of finance for more than a decade. The ongoing Eurozone crisis merely amplified already 'smoking' frictions between national legislation and supervision of banks and increasingly international theatre of their operation. Lax or ill-suited regulation coupled with weak national supervision of European banks provoked sky-rocketing levels of public debt build-up, aggravated through recession, making some of the banks so systemically risky for certain EMU member governments, that it appears they (national authorities) lack fiscal capacity and/or electoral support to solve the banking problems in either way.

This paper analyses the blueprint for and essential elements of the European Banking Union meant to deal with the above described issues in both positive and normative terms. In doing so, we shall try to confront and contrast the idiosyncratic shortcomings of the European currency union and anatomy of the Eurozone crisis at hand with the aims, instruments and scope of the banking union itself. After examining direction of causality between the weak national banking sectors and the

¹ Associate Professor, Institute of Economic Sciences, Belgrade, marko.malovic@ien.bg.ac.rs

deteriorating sovereign (public) finances, we go on to rectify both the objectives and design of the Eurozone's banking union. This paper argues that Eurozone's banking union has been deployed to deal with wrong problems equipped with ill-suited tools, which accounts for its early paralysis. However, the fact that leading members of the Eurozone hastily passed national legislation which exempts their strategically important banks from the outreach of the European Banking Authority they themselves have just established, casts doubt that the aforementioned financial polio may disguise something much more sinister coming up.

As a matter of fact, in this paper we claim that even if the current proposal were to be mended, Eurozone's banking union remains a necessary complement, but in no way a stand-alone supplement to the quasi-fiscal transfer mechanism to be woven around European Brady bonds issues – the latter still imperative for conquering the crisis in/of EMU in its current size, shape and form. For better or worse, EBU is a longer term project, not a quick fix to idiosyncratic crisis at hand [Dombret-Ebner, 2013].

The rest of the paper is organised as follows. Section 2 sketches historical, legal and macroeconomic background of the EBU blueprint, union proponents' intentions and mutually reinforcing nature of the twin crises which brought it up. Section 3 deals with concerns and problems in regard to painfully slow development of the EBU and its current design, finally offering corrective answers to what could/should be done in normative and positive sense. Section 4, finally, concentrates more deeply on who is going to foot the bill and where could/should the funds come from. It also further elaborates on whether EBU on its' own is enough or has to be launched together with quasi-fiscal federalism in order to decisively eliminate the twin crises paradigm. Lastly, section 5 offers the main conclusions and some closing thoughts.

2. Historical, legal and macroeconomic background of the EBU blueprint

The launch of the euro on 1st of January 1999 legalized multispeed EU without introduction of necessary changes in authorization and prudential supervision of banks (and other institutions for financial intermediation) headquartered in the Eurozone's member states. Obviously, creation of the common currency by and in itself temporarily solidified the capital/monetary aspect of the Single (internal) market and unleashed cross-border European banking operations ever so forcefully. On the other hand, differentials in credit riskiness perceived among different member states disappeared into thin air after introduction of the euro as they were not reflected in massively converging interest rates quoted for sovereigns and to the lesser extent everybody else beneath. Both developments have had an enormous mutually reinforcing impact on the dynamics of European banks' liquidity and intertwined indebtedness as well as on fiscal sustainability of EMU's members, soon giving rise to the so-called twin-crises which have been tormenting the Eurozone to this very day.

Twin-crises in theory are recognised as episodes of balance-sheet overexposure of banking (and in bank-centric Europe also corporate) sector and subsequent inability of the sovereigns to credibly abstain from bailing them out. Principal source of corporate and banking sectors' overexposure typically earmarks risky unprofitable investment propped up by moral hazard, cheap money and abrupt financial liberalisation [Malovic, 2006]. Nevertheless, one cannot rule out incidents of notorious fiscal profligacy where exploding government debt and state instrumentalisation -of leading national (commercial) banks' lending channels- have endangered their solvency. Thus, coexistence of more or less simultaneous banking and currency or banking and sovereign debt crises has been theoretically laid out in both causal directions, more on which could

be found in, *inter alia*, Malovic (2006, pp. 44-45). Eurostat's and ECB's data as well as anecdotal evidence, indeed, also prompt mixed conclusions as to the temporal genesis sequence of one (cause) relative to the other (effect). Italy and Greece, for instance, have had a long history of budget deficits and weak public finances eventually spreading the crisis onto their banking sector. France and many other EMU members are known of strategic alliances and certain political influence their commercial banks are susceptible to. Although econometric evidence in that regard tends to be scarce, it is hard to believe that yesterday's macroeconomic weaknesses and bloated sovereign risk wouldn't provoke cracks in the liquidity shield of the banking sector today, rather than to think that notoriously elusive causality probably isn't sufficiently cleanly pinpointed in the original regressions. Spain and Ireland, on the other hand, represent the cases where abundance of cross-border loans *ex-ante* and sudden-stop-invoked rescue of their respective banking systems *ex-post* threatened to bankrupt not only the local banks but the Irish and Spanish government themselves. Mody and Sandri (2012), for example, empirically prove that stress in the financial sector Granger-causes sovereign spread hike, while Aizenman, Binici and Hutchinson (2013) in a dynamic panel estimation find that a credit rating upgrade in the EU decreases respective sovereign's CDS spread by about 45 basis points on average. Be that as it may, there is another principal culprit for incidence of twin-crises in the EMU, irrespective of bankers' moral hazard, creation of the euro or expansionary monetary policy: the fact that, under Basel 2 rules, holding sovereign bonds for banks bears zero risk reservation weight!

Gradual dissipation of private safe assets along with fears of after-explosions of toxic assets in either banks' or their clients' balance sheets and in the end of the day general uncertainty in distinguishing between sound and unsound financial intermediaries, all of the above jointly prompted European banks to increasingly lend to sovereigns. Initial interest spread spikes followed by the wave of downgrading of European sovereigns both owe to the existence of common currency, under which individual central banks no longer have control over domestic money creation, which has effectively stripped them to emerging markets' original sin status (De Grauwe, 2011). Nonetheless, there still exists essentially no upper regulatory limit on the concentration of sovereign risk in banks' assets [Gros, 2013].

On a top of obsolete regulation that made it attractive for banks to hold bundles of government debt in their portfolios, too-systemic-to-fail anticipation of sovereign or pan-European bail out apparently created a financial plane for carry trade behaviour of internationally active European banks since the beginning of the euro crisis. To be fair, majority of German, French and Italian banks have always held a considerable fraction of total public debt [Gros, 2013].² However, even after intra-European balance of payments disequilibria became large, apparent and pressing matters, both Eurozone's core and periphery members' banks appear to have actively managed their sovereign bond portfolios by increasing their exposures to GIIPS IOUs in spite of already widening yield spreads on sovereign liabilities in period March-December 2010 [Acharya-Steffen, 2013]. Put differently, European banks were not taken by surprise with the whole sovereign debt overhang issue owing to exposures made prior to Eurozone crisis eruption; they were in fact deliberately fortifying their exposures in a herd-like behaviour, lobbying for a bail-out in the process. Hence, for regulatory

² German banks, for instance, had more than half of country's national debt on their balance sheets and started to diversify only with the advent of the common currency area [*Ibidem*].

arbitrage³ and game theoretical reasons, Acharya and Steffen (2013) proved that European banks have been, on average, long in GIIPS bonds (especially Spanish), and short in German bunds, which is to say that majority of internationally active European banks have been engaged in morally hazardous financing of peripheral sovereign debt with short-term borrowing from the EMU's core over better part of the Eurozone crisis span. Only recently this trend has reversed to home biasness as Core's banks retreated to domestic assets⁴ and many periphery's banks clinched to their national sovereign bonds on an even bigger scale than ever before.

It is with that historical and macroeconomic heritage that European Banking Union is supposed to come into existence. Truth be told, at the onset of the global financial meltdown, the only policy tool aimed at safeguarding stability of the European banking system(s), namely a lender of last resort function (to solvent banks in dire straits of illiquidity), has been in place only *de facto* and on non-statutory basis [Gortsos, 2012]. Moreover, the less known crisis-driven de Larosiere report from 2009, ordered by and drafted for the European Commission, originally advised that it was neither necessary nor feasible to set up a supranational supervisory institution for banks and financial sector at the E(M)U level. Instead, it proposed a creation of European System of Financial Supervisors made of three window-dressed regulatory authorities without any serious supervisory "teeth": a) The European Banking Authority (EBA), b) The European Insurance and Occupational Pensions Authority (EIOPA) and c) European Securities and (Financial) Markets Authority (ESMA), established and approved by the European Parliament and the Council. Gortsos (2012) rightly claims that only after the Greek bankruptcy, the need for EFSF (today's ESM) has been fully recognised along with some supranational resolution authorities for the Eurozone. Even though EFSF/ESM was originally envisaged as a fund for supporting over-indebted sovereigns, blatant lobbying of banking industry and the 'communicating vessels' nature of the twin crises juxtaposed it to pseudo-resolution fund meant to make up for any funding mismatch between bank liabilities and assets and provide direct recapitalization for troubled banks of yet undetermined viability [Malovic-Marinkovic, 2012].⁵

Finally, more recent creation of the so-called Single Supervisory Mechanism (SSM) marked a first solid footprint on an explicit road-map to forming the European Banking Union [Veron-Wolff, 2013]. The latest blueprint for foundation of the European Banking Union, it is believed, should be capable of a) putting an end to contagious zombification of European banks as well as of b) untying

³ According to still positive legislation, banks have no legal obligation to reserve any capital against their holdings of government debt, even if it is denominated in a currency over whose issuance those sovereigns don't have a say at all [Buiter, 2008], [Gros, 2013].

⁴ Malovic and Marinkovic (2013, p.9) note that after German banks and the rest of the private capital from the core had their go in once remunerative carry-trade endeavours in the EMU's periphery, they decided to leave without sharing the bill, sticking to super-safe domestic investment instead. Consequently, Bundesbank and German tax-payers have been lured in those stealth bails. Therefore, by passively monetizing the intra-European BoP disequilibria through Target 2, Bundesbank (and ESCB) did put the Hume's price-specie-flow mechanism on hold [Burda, 2012], but reality check points at Germany and the core of the EMU being equally if not more reluctant to carry out regional adjustments (of relative prices and alike), a task proverbially pinned on the EMU's periphery alone. This subpar outcome is not entirely unfair, since "if unsuccessful in bailing in the banks and exporters- Bundesbank has after all been protecting the interests of German businesses; it is additionally reasonable since any more pronounced restrictions of Target 2 balances would hit Germany first" [Malovic-Marinkovic, 2013, p.9]. As a corollary, Bundesbank's exposure (claims) towards the rest of the ESCB amounts to more than 700 bill.€ or about 30% of German GDP [Burda, 2012].

⁵ Article 15 of the ESM Treaty explicitly allows for financial assistance in recapitalisation of financial institutions of an ESM member country [Gros-Schoenmaker, 2012, p.7].

the “diabolical loop” between the bank solvency and fiscal standing of its sovereign [Gros-Schoenmaker, 2012].

Just before or in parallel with the aforementioned institutional kick-offs, ECB has been fire-fighting the crisis firstly with extra refinancing credit to the tune of €900bn to commercial banks in countries worst hit (as measured by its gross payment system known as Target 2), through so-called LTROs (long term refinancing operations) and afterwards through the more blunt OMTs (outright monetary operations). Unsatisfactory effect of the European version of quantitative easing (QE) bore resemblance with the US counterpart in as much as the banks that are stronger appeared to had been hoarding cash. Twofold outcome was another round of liquidity squeeze, yet with an encouragement for European banks not to deleverage too much too soon [Malovic-Marinkovic, 2013]. Contemporary OMTs (due to full sterilisation not to be confused with QE) proved to be much more effective (pseudo-fiscal)⁶ measures, although probably untenable and overly expensive in the longer run.

3. EBU: Critical appraisal and feasible corrective proposal

Appointed by the European Council according to motion made by the Commission, European Banking Authority is the new institution responsible for “vertical transfer” in bank regulation as well as in specific tasks concerning macro-prudential aspects of supervision, from member states onto the E(M)U jurisdiction, with due regard for the unity and integrity of the Single market [Gortsos, 2012]. EBA’s task is to elevate European banking regulation to the level playing field, while within the SSM it is to adopt the pan-European capital requirements regulation (CRR) in supplementing it by the fourth capital requirements directive (CRD4) previously aligned with Basel 3 framework [Veron-Wolff, 2013]. Thus, SSM shall implement a harmonized supervisory rulebook based on Basel 3 accord primarily for the Eurozone’s banks, although non-Eurozone member states are expected and encouraged to enter close cooperation agreements with EBA&ECB and thereby effectively make their banks too fully participating members of the SSM. The actual supranational supervision is assigned to the ECB, assuming prior erection of the usual and appropriate ‘Chinese walls’, in order to legally and practically prop up the separation of monetary policy and price stability tasks from its supervisory and LLR duties [Gortsos, 2012]. In carrying out supervisory assignments, national authorities will act as the ECB’s executive arm, just as Eurozone’s member state central banks belong to the ESCB in the context of single monetary policy. However, when it comes to micro-prudential supervision, ECB itself is envisaged to be liable only for credit institutions, financial holding companies and financial conglomerates – in other words, E(M)U branches of banks incorporated in non-EU countries, leasing, factoring and e-money firms, payments institutions, investment firms inclusive hedge funds as well as (re)insurance companies are left out of scope of the ECB’s mandate and remain the sole responsibility of relevant national agencies [*Ibidem*]. As far as timeframe for the ECB’s supranational supervisory involvement is concerned, it is supposed to commence in three waves: from January 2013, over banks which received or requested state aid/rescue, as of July 2013 over ‘systemically important’ credit institutions and from January 2014 onwards over all remaining banks, holdings or conglomerates. ‘Systemic importance’ of the credit

⁶ For more on the pseudo-fiscal nature of OMTs consult Feldstein (2013, p.4).

institutions, at that, will be evaluated on the basis of weighted average of their size and the magnitude of their cross-border activity within the EMU [Gortsos, 2012].

However, pan-European regulation by the EBA and supervisory jurisdiction of the ECB are simply not enough for the full-fledged banking union. The role of banks in the Eurozone is crucial. According to Wolf (2011), almost entire money balances in the EMU consist of financial intermediaries' liabilities (currency in circulation amounts to only 9% of M3). In such a situation, if certain big enough banks with potential cross-border repercussions happen to be on a verge of collapse, there's not only a risk of a bank run but also a systemic risk of a run on a national banking system. This is when two other equally important elements of banking union should come into play, and namely Eurozone-wide deposit-insurance scheme as well as bank recovery mechanism (the so-called Single Resolution Mechanism). Nonetheless, this is also where least progress and next to no agreement has been made thus far.

Moreover, it would be dishonest and incorrect to claim that EMU has reached anything remotely resembling consensus or focused standpoint in regard to regulation and supervision limbs of the EBU either! Strong are the voices asking whether we even need a supranational regulation and supervisory authority. Even though SSM intends to flirt with EU-wide extended membership, UK and Sweden have made it sobering-clear they were not interested in joining it at all. Nevertheless, we would argue that Eurozone badly needs (at least partially and in pecking order) centralised regulation and supervision institutes for several intrinsic features of its dramatically distorted financial landscape. These arguments run as follows, laid out not only to hopefully convince the reader in sensibility of the SSM, but also to reveal its weaker links or vague details to date.

First of all, it is imperative to realize that European banks grew disproportionately and on a wrong diet. While, in principle, growing integration of financial markets improves resource allocation, lowers prices and enhances international risk-sharing, Buch, Körner and Weigert (2013), Darvas (2013) as well as Dombret and Ebner (2013) rightly claim that European financial sector integration has been excessive in at least four distinct aspects. For one, increase in explicitly or implicitly guaranteed foreign liabilities of several member countries has exploded beyond their debt-servicing capacity (see Table 1 and Figure 1 in the appendix). Two, financial sector integration in the EU has predominantly taken the form of debt at the expense of equity finance, although precisely equity brings to the table much needed state-contingency and enables *ex-ante* insurance in Arrow-Debreu fashion [Buch-Körner-Weigert, 2013]. Thirdly, non-financial sector in E(M)U depends heavily on banks loans at the expense of debentures or commercial paper (see Figure 3), as research shows that loan supply played a key role in the European credit (rating) crunch.⁷ Darvas (2013) maintains that exactly for disruptive effect of limited loan supply normal lending in E(M)U hasn't been restored yet, aided only by very slight substitution of receding bank loans with debt securities. Finally, these debt-ridden financial claims in EMU exhibited much faster paced growth than trade or GDP, which caused not only banks' alienation from the real economy but also the outpacing of their institutional environment [Dombret-Ebner, 2013]. Thus, cross-border activity propelled both the size and the

⁷ On a top of a decade long trend of banks' agglomeration and concentration, $\frac{3}{4}$ of financial sector assets of the EU are located in the Eurozone, and $\frac{3}{4}$ of the remaining one in the UK [EBF, 2012]. Conclusion: EBU is very much EU's concern, since if Eurozone's financial sector fails, EU's finances will be simply wiped out. Moreover, out of 0.88 trillion € of loan growth in 2011, lion's share at 0.84 trillion € was on the account of interbank lending [*Ibidem*], a potential domino effect which could be effectively tackled only by supranational rules of engagement.

extent of financial leverage of European banks (especially those from the EMU's core, e.g. Germany) to unprecedented magnitude, as evident from the Figures 2 and 4 in the appendix. Pan-European regulation and supervision is essential in gradual effort of rectifying such trends.

Next, in spite of certain reversal in cross-border exposure and somewhat fragmented financial markets in the EMU as of late, the shortcomings of 'cherry picking' national regulatory frameworks and weak supervisory standards in national domains (for example insufficient equity on banks' balance sheets, pro-cyclicality of capital requirements, collision of national interests, national endowment- or legal definition mismatch⁸), has enabled a build-up of humungous risks in the European banking sector [Buch-Körner-Weigert, 2013]. Furthermore, decisive steps to crisis resolution are still being delayed by means of regulatory forbearance due to smelly ties between national political leaders and their banks. Even though EMU had so-called Supervisory Colleges ever since 2010, as informal fora meant for monitoring and coordination of problematic banks, SSM is indeed the first major landmark on the way to full-fledged EBU. But just how impeccable it promises to be by the current design?

SSM has a modern, flexible and all-encompassing shell, albeit with poorly masked absence of actual muscle, to put it bluntly. On positive side, strengthening pan-European EBA rules with ECB's access to data and policing instrumentation is a definite step forward. Previous stress-tests simulated by national supervisors were not diligent enough and consequently convinced nobody. The ECB, however, will undertake an "asset quality review" before it officially assumes the role of the Eurozone banking supervisor next year, with good odds for lifting the cloud of suspicion in regard to the health of EMU's banks [The Economist, 2013]. In addition, speaking of ECB, we disagree with number of authors that supervisory function ought to be completely independent from the ECB: *a*) diverging EBA's supervisory standards from the ECB's supervisory powers on the ground simply won't happen if supervisors in Frankfurt honour the subsidiarity principle, focusing themselves on the most systemically important cross-border institutions while delegating the operative supervision of smaller ones back to competent and regulatory harmonized national authorities under their command. Striking a wise compromise along those lines offers a triple pay-off: smaller perimeter of pan-European supervision relaxes the scope of mutualized resolution, keeps newly created ECB's supervisory arm within its depth and –as observed by Gros and Schoenmaker (2012, p.5)- avoids political resistance to denying "thousands of small(er) banks from the area of influence of national authorities which might actually be better placed to monitor them" anyway; *b*) similarly, objections that ECB officials would be preoccupied with monetary policy and price stability objectives, in other words, reluctant to blow the whistle over "bigger picture", "peace in the house" etc. could be just as easily confronted with historical incidents of independent supervisory agencies having been all too trigger-happy or timing-clumsy in foreclosing the banks. On the negative side, even SSM is being put together frustratingly slow and being stuffed with often blurry filling in respect to fine difference between drafted and (f)actual. For example, one still stumbles over announcements that ECB is capable of and is going to supervise all 6000 (EMU)-8000 (EU) credit institutions and/or foreign subsidiaries in the E(M)U. What's more, the fact that leading members of EMU secretly passed special legislation aiming to exempt their systemically important banks from the outreach of EBA

⁸ Notwithstanding different numerical requirements or antagonism of different national interests, Dombret and Ebner (2013) note that even when interests are aligned, member states could have different budgets at disposal or different legal definitions of what for instance constitutes or lawfully triggers a bankruptcy.

and consequently SRM (in the making), only hours after reaching consensus on its establishment, doesn't help either clarity or credibility of the EBU under construction. In addition, SSM should be further supported by prudential bylaws along the lines of Glass-Steagall, Volcker rule or demarcation suggested by the Vickers' commission in the UK. Last but not least, once systemic importance and contagion capacity is reliably quantified within pecking order, peer-reviewed supervisory system, SSM ought to introduce the approaches that seek to internalise the negative externalities caused by too-systemic-to-fail banks, e.g. Dombret and Ebner (2013) suggest special capital surcharges and/or Pigouvian steering taxes. Ideally, those surcharges should fully cover specific bank's risk increment to the VaR of the whole EBU. Lastly, certain areas of regulation have been deliberately omitted from or pulled out of the EBA rulebook and passed onto the resolution segment of the EBU precisely because there is a bitter disagreement on the endgame drill when it comes to winding down or outright liquidating failing banks.

That said, we firmly subscribe to Veron's and Wolff's (2013) principle according to which EBU and SSM should entail a mechanism for risk-sharing, not loss-sharing. Hence, improved version of EBA and ECB's supervisory rulebook in coordination with SRM legislation must take an irrevocable step towards swifter ability and readiness to impose losses on banks' creditors including senior unsecured ones. In other words, without endgame ammo, provided by the recovery and resolution mechanism, regulation and supervision amount to no more than an empty threat. Ironically, even in such a disabled beta version, SSM probably won't be up and running before summer 2014. Once again, it makes one wonder whether EMU members are seriously building a raft, actually waiting for the flood to eventually evaporate on its own, or rather secretly providing for the (individual) one way ground transportation. Nevertheless, before unwrapping the Pandora's Box of developments and controversies in this regard, let us study the urgency, financial scope and political willingness for the installment of first aid cupboard in every banking union – its mutual deposit insurance scheme.

Deposit insurance in contemporary E(M)U is provided via variety of national deposit guarantee funds, with some countries (like Austria and Germany) relying on more than one local scheme simultaneously. Some mandatory schemes are enhanced by voluntary ones, some provide for more than mere deposit insurance (German Sparkassen scheme extends to total liabilities' mutualisation too), but almost all of national deposit guarantee schemes reveal having access to strikingly miniscule prepaid funds relative to the amount assumed by covered deposits, possibly the best illustration of messy divergence in EBU's deposit funding standards [IMF, 2013].⁹ And yet Vice-President of the ECB not long ago confirmed that common deposit insurance in the EMU if at all isn't required any time soon [Gros, 2013*]. Despite the fact that 19 year old process of harmonisation of European deposit guarantee schemes (DGS) speeded itself up after the collapse of Lehman, resulting in aligned minimum deposit protection and maximum payout periods, further convergence let alone mutualisation of DGS has been recently suspended¹⁰, pending upon adoption of the EMU-

⁹ Divergence in DGSs' nominal capacity relative to respective GDPs is illustrated in the Figure 5 of the appendix.

¹⁰ European Parliament backed Commission's target of 1.5% of deposits covered as a multiyear target for an *ex ante* fund, whereas EU Council didn't agree on anything over 0.5% for Eurozone's DGS [Gros-Schoenmaker, 2012]. The irony of it all is that even a bigger of the two (1.5% of deposits covered) could plug the damage equivalent to only about one big omnipresent Euroland bank or perhaps three smaller ones, *caeteris paribus*, which is ridiculous as compared to the perfect storm which may besiege the Eurozone if it remains mired on a sticky wicket. Therefore, EBU in all likelihood cannot solve the legacy assets problem without additional fiscal backstop, but back-of-the-envelope calculus performed

wide recovery and resolution mechanism through a new directive (see Table 2 in the appendix). Part of the objection is that retail deposits are immobile (but alas assets and other liabilities are!) and that each sovereign is equally strong (yet country specific shocks could plague national banking system triggered by big cross-border active banks from abroad). This truth is obviously politically sensitive on both macroeconomic and financial system level. First of all, it is a misconception that any checkable deposit below guaranteed sum is fully safe, always recoverable and as good as cash: it in fact constitutes a credit recoverable in full only under narrow banking paradigm [Mayer, 2013]. Second of all, in a monetary union with free capital flows (at least when it comes to legacy assets which turned soar) financial aspects of national boom-bust cycles could have either international origins or international repercussions, or both really. Put differently, systemic risk doesn't stop at national borders hence national debt insurance funds may prove insufficient to keep depositor losses at politically acceptable and pre-obliged bay, moreover, specific international making of banking failures can sometimes imply unfairness by mopping them up solely out of national purse.

It is quite another, formidably complex, matter to advise just how Eurozone's DGS ought to be designed and where from. Notwithstanding the fact it's increasingly uncomfortable that banks are nationally supervised, while they expand their balance sheets (as well as risk-taking) internationally, there's neither money nor political will for fully federalised DGS, much less for mutualisation of all the bank debt/likely bank losses across the Eurozone [Malovic-Marinkovic, 2013]. Of course, that hopefully may not be quite so necessary: at the end of the day, in all but the most extreme events disbursement of deposit insurance is a liquidity- rather than solvency problem. Sure thing, one can never overestimate the danger of excessive and covert financial leverage back-firing, but consolidated balance sheet of the Eurozone's banks computes liabilities of 27 trillion € of which only a third represent deposits belonging to households and non-financial institutions, meaning that if depositors remain super-senior only very gigantic losses could threaten them and activate (inter)national safety nets [Gros, 2013*].¹¹ Still, low fungibility in the face of adversity, high importance of timeliness in deposit insurance disbursement and a sorry state of financial affairs across EMU's national DGSs, call for several pieces of policy advice. 1) If one takes recently published datum of 51,000€ worth of property in possession of an average German person as the EMU-wide yardstick, it becomes patently obvious that 50K per head (especially if per bank) is high-enough and more realistically affordable deposit guarantee. 2) Eurozone's DGS, regardless of its final shape and form, should be separated from resolution and recovery fund on moral hazard grounds (on behalf of both bank(st)ers and crony politicians), just as the absence of adequately beefed up DGS would again invoke moral hazard (absent any deposit insurance bank(st)ers would bet on the bailout with the highest likelihood). 3) Legacy assets ought to be dealt with simultaneously yet independently from DGS, whatever mechanism EMU ended up choosing. In closing this inherited gap there might have to be at least symbolic federalization of losses and/or mutual long-term borrowing across national DGS, bearing in mind that losses were made in monetary union and to the extent because of common currency, whereas house-cleaning and building up deposit insurance fund(s) would further weaken already shaken profitability of European banks [Malovic-Marinkovic, 2012, p.6], [IMF, 2013, p.5] 4) DGS premiums should properly reflect risks involved whilst EMU-wide DGS ought to be mandatory. 5)

by Gros and Schoemaker (2012, p.11) does point out the benefits of pooling, because currently no national DGS on its own could cope with the failure of even single one of Eurozone's megabanks.

¹¹ Interestingly, even in most enflamed and crisis-stricken GIIPS region, proportion robustly holds, with 1 trillion worth covered deposits against 7 trillion assets which risk-weighted amount to just under 3 trillion € collateral [*Ibidem*]

We see only two theoretically viable strategies for launching mutual deposit insurance fund that could pass the number-crunching test: slightly modified Mayer's (2013*) narrow banking proposal and gradual reinsurance or coinsurance mechanism put forward by the EU Commission, Gros and Schoenmaker (2012) and Gros (2013*).¹²

Copernican twist adapted from Mayer (2013*) assumes prescribing compulsory 100% reserve requirement (provided by central bank reserve money) for covered deposits fraction of deposit potential, thereby dealing with DGS first, SRM immediately after and with SSM at the very end of the EBU-creation process. Reserve holdings would be electronically created by LLR facility and deposited with the ECB (perhaps for a fee payable by banks and/or their depositors). No industry or national DGS would be necessary. Positive aspects of the proposal include better control- of book money creation and therefore over asset bubbles formation, substantial retirement of sovereign debt via consolidating government-bank claims through reserve money issuance as well as decrease of sovereign's interest costs [Mayer, 2013]. Less clear are the overall inflationary consequences of tapping the safety net and growth effects of reduced financial intermediation.

On the other hand, more down-to-the-earth proposal stresses the benefits of Pan-Eurozone risk sharing phased in either as reinsurance or coinsurance multilateral safety net. However, Gros's and Schoemaker's (2012) proposal to concentrate a mutual DGS on 70 or so largest EMU banks doesn't make too much sense. The ECB can indeed usurp supervisory powers from national agencies pretty rapidly should the anamnesis so require, but national versus EMU-wide DGS checkpoint cannot be *a posteriori* efficiently or credibly slidden, neither in respect to bank population charged nor in terms of altering the rules of fund engagement.¹³ Hence, mutual coinsurance fund of prepaid 1.5% deposits covered on pan-Eurozone level (some 6,000 banks) as a safety valve on a top of existing national DGS consoles is in order, followed by need-be additional 0.5% *ex post* levies earmarked by the Commission [Gros, 2013*]. Gros and Schoemaker (2012, p.10) found some 4.2 trillion € of covered deposits for all Eurozone banks under 100,000 € guaranteed, implying that some 60 billion € would have to be collected in the common pool to enact the first line of the EBU's defense. We venture to guess that with 50,000 € guarantee that number would drop to about 40 billion €. Preferably, in the first 5 years of EBU's existence all the levies should go in the common pool, whereas later on contribution to national DGSs could be filled up in accordance with degree of systemic risk still around and extent of cross-border activity of every individual bank. In the meanwhile double payment premia may be allowed or avoided depending on severity of liquidity squeeze perhaps even on a country by country case, but definitely not on a bank by bank case! Needless to say, common DGS premia ought to be compulsory in full amount over initial 5-year interval. After 5 years, European bank could contribute only 80% to a local failure, while purely national/local banks would be liable the full 100% to a national DGS as in Gros and Schoemaker (2012). Finally, redemptions from the common DGS should wisely replicate private reinsurance contracts, contracts that typically provide for deep deductibles as an incentive compatible mechanism

¹² Eclectic proposal put forward by Suarez (2012) falls somewhere in between the two basic ones already mentioned, and provides for possibly smooth transition from Gros's (2013*) and Gros's and Schoemaker's (2012) to Mayer's (2013*) blueprint.

¹³ After all, history tells us that banking crises do not usually originate with the largest banks, but often with smaller fast expanding institutions that have a motive to offload assets into off-balance sheet SPVs or to split it in smaller units so to slip under the ECB's regulatory radar [Münchau, 2012].

that would surely prevent national authorities from engaging in morally hazardous policies. In other words, Eurozone's DGS should as a rule pay only after national DGS resources were appropriately tapped (where appropriately must be algebraically predefined) and in cases where losses are particularly large or of systemic international origin [Gros, 2013*].

At last, the third extremity of every banking union, common recovery and resolution authority, in EBU's case don't seem to have anything in common with one another, suggesting to even rather superficial analyst that we are actually faced with "Separate Resolution Mechanisms". However, allowing for orderly restructuring and resolution of zombified European banks is of absolutely vital importance in breaking the bailout expectations among institutions that would otherwise indefinitely remain too-systemic-to-fail [Dombret-Ebner, 2013]! Therefore, the newest ECOFIN's call -to banks in the EMU to amass minimum loss-absorbing cushion in own equity and eligible liabilities (MREL)-undoubtedly deserves a warm welcome [Gros, 2013*]. In addition, depositors should be granted a clear priority over senior unsecured bondholders and alike private creditors. However, all the bail-in mechanisms and mere hints at central burden sharing authority (i.e. for allocating losses) were postponed for 2018 in the previous directive, which owing to stubbornly persistent opposition by Germany almost certainly leaves us with loose cooperation among biased national authorities and a flimsy backstop for months if not years to come [Veron-Wolff, 2013], [The Economist, 2013]. Truth be told, even a more thorough harmonization of national bank insolvency regimes will/would take more time than envisaged for the creation of the SRM, which reiterates the dilemma about genuine readiness for EBU creation and real longer term agendas that most influential EMU members may or may not have.

Moreover, Johnson (2013) warns against disunity in cross-border resolution but also against top 6-ish Eurozone's megabanks (see Table 3 in the appendix) as a clear and resilient threat even for potentially pan-European SRM and the federal(ised) fiscal backstop. National politicians do not want to compromise their power and material influence; governments don't want their hands supranationally tied when deciding how to best protect the interest of their electorate, unless the source of power is completely removed upwards. But even Eurocrats faced with cross-border banks of gigantic size will be unable to tolerate their failure. That implicit subsidy and scale&scope economies which allow them to borrow more cheaply further increase the amount of risk they take up, thereby reinforcing their too-systemic-to-fail status [Johnson, 2013]. Consequently, SRM should carefully examine firewall solutions drafted in Basel 3, Dodd-Frank Act for the US as well as ICB- or Vickers' Report in UK, in order to put a non-disruptive but precautionary cap on the size of the biggest financial firms.

Instead, single resolution authority should be erected as powerful, independent, rapid decision making body which would expediently deal with failing banks by either: closing them down and liquidating leftovers (with lateral deposit pay-off), mediating a take-over or providing direct public support [Gros-Schoenmaker, 2012]. Banks that fall short of EBA's stress tests but appear to be solvent ought to be recapitalized by fresh equity from private investors, by bailing in their creditors and only as a last resort by pouring in taxpayers' money [The Economist, 2013]. Obviously, it goes without saying that there could be no SRM or even smoothly operating system of

harmonized¹⁴ national banking resolution authorities without credible, clearly defined and properly funded fiscal backstop(s). Different fiscal backstops and political gridlock surrounding them are given due consideration in the next section of the paper.

4. Fiscal backstop and political gridlock

Under current circumstances, it is safe to say that EBU does not quite exist as yet; in addition it doesn't enjoy support of a serious and credible fiscal backstop either, although having one now would probably come closest to flagrant dissipation in exchange for a little time.¹⁵ For ethical and financial credibility reasons, having a SRM would earn a preference, but be that as it may, one thing is for sure: there could be no effective resolution mechanism and anti-bailout mentality without independent and abundant mutual deposit insurance scheme.

In addition, if it played its cards wisely, EMU shouldn't need gargantuan fiscal backstop for the banking union as such. EBU aside, Brussels's official response to the Eurozone crisis so far has been enforcing the fiscal compact as well as forming and subsequent beefing up of the ESM (former EFSF). ESM cannot be a suitable fiscal match for Eurozone's banking problems for at least five reasons. First, ESM funds are urgently needed elsewhere, because if EU fails in saving its over-indebted sovereigns and the common currency there'd be no EBU to dwell on. Second, ESM (or rather EFSF), despite German arm-twisting insistence on misusing it every now and then as the bank redemption fund, was originally set up as a rescue fund focused on sovereign debt stabilisation. This in turn provokes two additional observations. Thirdly, ESM hasn't got even remotely enough monetary power to vouch for the likely size of Eurozone's banks resolution.¹⁶ Fourth, bailing out banks is almost always considerably more expensive from bailing out sovereigns. The losses to be covered could be huge. The total debt of banks located in the six countries most damaged by the crisis (GIIPS + Cyprus) amounts to €9.4tn. The combined government debt of these countries stands at €3.5tn. Even if a relatively small fraction of this bank debt were to turn into losses, these would be a huge blow to the ESM's loss-bearing capacity [Sinn-Hau, 2013].

Quite to the contrary, the use of public money in the whole banking mess clean-up should be kept at the minimum. Public money, if all other forms of financing were exhausted, should never ever be spent on loss-absorption, but exclusively on technical aspects of restructuring process and in providing capital for a new bank possibly emerging from the resolution [Carmassi-Di Noia-Micossi, 2012].¹⁷ Reintroducing market discipline and stronger support to development and prominence of equity-based securities in Europe would be of tremendous help for EMU in the medium run. As a matter of fact, if our back of the envelope calculus is on track, bailing in policies could provide most

¹⁴ Minimum harmonisation is imperative to rule out the incidence of financial burden being borne by taxpayers in one member country potentially arising from too lax a regulation in another member country [Dombret-Ebner, 2013].

¹⁵ And according to Wyplosz (2012), when European politicians ask for more time, they want to kill the project.

¹⁶ ESM's capital to the tune of 500 billion €, much less some 60 billion cap for direct recapitalization of banks, is hardly a match for 2,5 trillion € needed in the short run to meet more stringent EBA's capital requirements. The entire ESM money, indeed looks like humming bird when compared with the size of Eurozone's banking sector (34 trillion € or 360% of EMU's GDP).

¹⁷ Regretably, Commission's text leaves too much ambiguity and discretion pockets for resolution authorities when undertaking corrective action [*Ibidem*].

of the threshold money for joint DGS (from private sources) as well.¹⁸ However, reasonably generous fiscal backstop is needed on a macroeconomic front if we are to save the euro and monetary union in its current size and unclog sclerotic financial intermediation in the Eurozone. After all, by repairing public finances in the Eurozone, policymakers would more or less automatically and in any case evasively restore many of those banks whose only ‘sin’ was that at some point they became, one way or the other, reckless buyers of the last resort of their national sovereign debt.

As explained in detail by Malovic and Marinkovic (2013), we don’t see the viable alternative to Eurozone’s a la Brady bonds for a job of reducing bank creditworthiness dependence on the respective national sovereign’s credit quality. Eurozone’s Brady bonds would constitute a transfer of tranches and elimination of prohibitively high interest rates without any giant macroeconomic bailout or nominal debt forgiveness by means of basically providing a federal quasi-fiscal guarantee which would probably never be called upon. As eloquently written by Soros (2013), guarantees have a peculiar character: the more convincing they are, the less likely are they to be activated. European Brady bonds, sure enough, won’t solve the competitiveness gap, meanwhile considerably closed by other policy tools, and should be further strengthened by euro’s real depreciation, EIB interventions and price cum wage adjustment mechanism along the core-periphery axis. However, ECB issued bonds¹⁹ would not only ease up the financial markets, resume the bank lending and recover critical asset classes practically overnight; it would also enable repackaging of such upgraded debt fitting for hedge funds’, non-EU banks’ and alike appetite, thereby effectively achieving quantitative easing, but at the expense of global investors, rather than the union’s taxpayers. Thus, Soros (2013) is correct in saying that if Germany is opposed to Eurobonds, she has no right to nor it should deter the others from introducing them anyway.²⁰

With both political and fiscal consideration, we can have more or less Europe, but we cannot perpetuate *status quo*. Enhanced economic integration is feasible even after dismantling the common currency; in fact it may actually improve upon. For more EMU, fair degree of fiscal federalism is inevitable, featuring quasi-fiscal transfers, cross-subsidisation and EBU. To that end, Eurozone’s economies would have to swallow more reform, much more deregulation, greater unification and less austerity. For lesser or no EMU, their members could give up common currency and/or downsize Union to more manageable one or two truly optimum currency area(s). That way, notwithstanding considerable drawbacks and formidable technicalities in execution of any of the ejections, we may end up with one or more banking unions too.

Eurozone’s version of impossible trinity, *caeteris paribus*, claims that keeping common currency, Germany and GIIPS in the EMU cannot hold together for too long. EBU version of policy trilemma, similarly, spells that one cannot simultaneously sustain internal (or single) credit market, national regulatory cum supervisory jurisdictions and pan-European financial stability. One of the three must be laid off, and however improbable and catastrophic each possibility looks today, other

¹⁸ Obviously commonly collected threshold would not be sufficient if it comes to the worst - cascading banks runs and total financial meltdown, in which case joint DGS might need to have recourse to some ‘federal’ fiscal backstop. German dismissal of joint DGS is putting not only EBU but also EMU in serious jeopardy.

¹⁹ Perhaps they could be issued by the ESM, but ultimately would have to be guaranteed by the ECB, for LLR reasons elaborated in Wyplosz (2012).

²⁰ Brady bonds issued by the currency union that excludes Germany would still compare favourably with those of the U.S., UK and Japan. The net debt of these three countries as a proportion of their GDP is actually higher than that of the ‘Eurozone’ excluding Germany [*Ibidem*].

things equal, one impossibility shall happen. And soon! European policies towards the Eurozone crisis so far, apart from Draghi's OMT as a brief relief, have largely made matters worse. Without Eurobonds, credible full-fledged EBU and controllable megabanks' size, risk exposure-austerity-depression-unemployment-bankruptcy spiral shall backfire in Germany herself. Therefore, immediately after German elections in September, more meaningful and highly informative fiscal backstops should appear on the horizon. Without beating around the bush, we shall have either proper EBU or none at all.

5. Conclusion

Unless the current political gridlock is a temporary outcome of German electoral arithmetic, EBU is essentially buried alive and amounts to no more than a pure deception.

Pernicious link between deteriorating public finances and heavily exposed national banks is not and cannot be broken without full-fledged and therefore risk-sharing EBU, which is supposed to rest on all three pillars: single rule-making and supervisory mechanism, common deposit insurance scheme as well as single resolution authority. We are currently lacking two of the aforementioned three. The question of legacy-assets in troubled banks remains unresolved too. Be that as it may, EBU on its own couldn't solve the Eurozone crisis even if were alive and well, since it is by its very definition a longer term project, rather than a fire-fighting vehicle.

One way or the other, EBU stands no chance whatsoever without further "federalisation" of the EMU, although its functional survival may be arranged both with and without Germany's continued participation. If Germany is opposed to EBU and Brady bonds (the latter required for exiting currency and sovereign-debt layers of the Eurozone crisis), she has no right to, nor the fact should, deter others from introducing them anyway. In other words, EMU needs both the EBU and Eurozone's Brady bonds to draw a final line under its crisis. At the time of this writing, there's neither in sight.

In the end of the day, we can arguably have both more EMU and less EMU, the former associated with giving up common currency or downsizing it to a more manageable, one or more truly OCA(s), whereas latter associated with fair degree of fiscal federalism via quasi-fiscal transfers, minimal amount of debt mutualisation via EBU and Brady bonds, but we cannot perpetuate this *status quo*! Coming back to banking union blueprint, EBU version of impossible trinity spells out that one cannot simultaneously sustain single credit market, national regulation cum supervision and stability of pan-European banking industry.

Hence, immediately after the September elections (in Germany), Eurozone will get either well-founded and properly treated EBU or none at all.

(This paper is a part of research projects 47009 (*European integrations and social and economic changes in Serbian economy on the way to the EU*), financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia. The usual disclaimer applies.)

6. Appendix

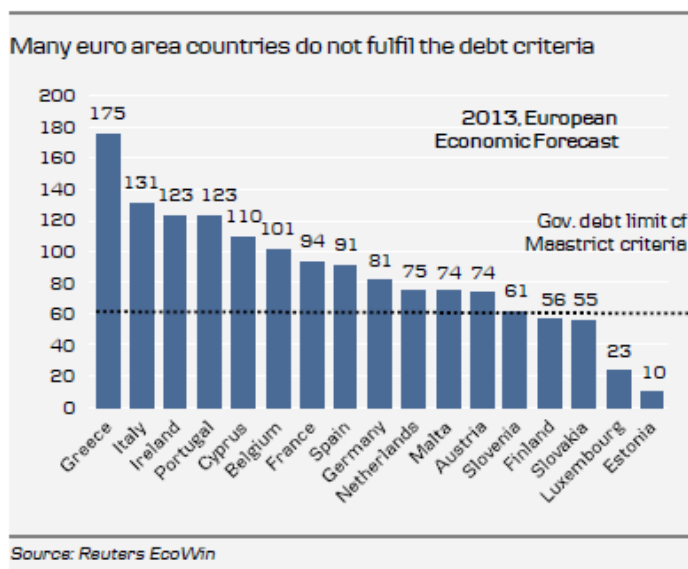
Table 1: EMU's Vitals

Outlook for key economic variables													
EURO	GDP (1)		CPI (1)		Unemployment (2)		Govt. Budget (3)		Govt. Debt (3)		Primary balance (4)		
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2012	2013	2014
Austria	0.6	1.8	2.0	1.8	4.7	4.7	-2.2	-1.8	73.8	73.7	0.0	0.0	0.9
Belgium	0.0	1.2	1.3	1.6	8.0	8.0	-2.9	-3.1	101.4	102.1	-0.2	1.1	0.7
Cyprus	-8.7	-3.9	1.0	1.2	15.5	16.9	-6.5	-8.4	109.5	124.0	-4.6	0.5	1.6
Estonia	3.0	4.0	3.6	3.1	9.7	9.0	-0.3	0.2	10.2	9.6	1.6	-1.7	-0.9
Finland	0.3	1.0	2.4	2.2	8.1	8.0	-1.8	-1.5	56.2	57.7	1.6	1.5	1.6
France	-0.1	1.1	1.2	1.7	10.6	10.9	-3.9	-4.2	94.0	96.2	-1.5	-0.5	-0.2
Germany	0.4	1.8	1.8	1.6	5.4	5.3	-0.2	0.0	81.1	78.6	1.6	2.1	2.0
Greece	-4.2	0.6	-0.8	-0.4	27.0	26.0	-3.8	-2.6	175.2	175.0	1.5	3.7	1.9
Ireland	1.1	2.2	1.3	1.3	14.2	13.7	-7.5	-4.3	123.3	119.5	-8.6	-3.8	-2.4
Italy	-1.3	0.7	1.6	1.5	11.8	12.2	-2.9	-2.5	131.4	132.2	2.0	4.8	5.6
Luxembourg	0.8	1.6	1.9	1.7	5.5	5.8	-0.2	-0.4	23.4	25.2	1.0	0.0	-0.8
Malta	1.4	1.8	1.9	1.9	6.3	6.1	-3.7	-3.6	73.9	74.9	0.5	0.8	0.3
Netherlands	-0.8	0.9	2.8	1.5	6.9	7.2	-3.6	-3.6	74.6	75.8	-1.5	-0.3	-0.3
Portugal	-2.3	0.6	0.7	1.0	18.2	18.5	-5.5	-4.0	123.0	124.3	0.9	2.2	3.7
Slovakia	1.0	2.8	1.9	2.0	14.5	14.1	-3.0	-3.1	54.6	56.7	-3.1	-2.4	-2.5
Slovenia	-2.0	-0.1	2.2	1.4	10.0	10.3	-5.3	-4.9	61.0	66.5	-3.0	0.3	0.7
Spain	-1.5	0.9	1.5	0.8	27.0	26.4	-6.5	-7.0	91.3	96.8	-4.5	-1.4	-1.5
Euro average	-0.4	1.2	1.6	1.5	12.2	12.1	-2.9	-2.8	95.5	96.0	-0.2	1.2	1.4
Denmark	0.7	1.7	1.1	1.6	7.7	7.6	-1.7	-2.7	45.0	46.4	1.9	-1.1	0.4

1) % y/y. 2) % of labour force. 3) % of GDP
Source: EU Commission (spring 2013)

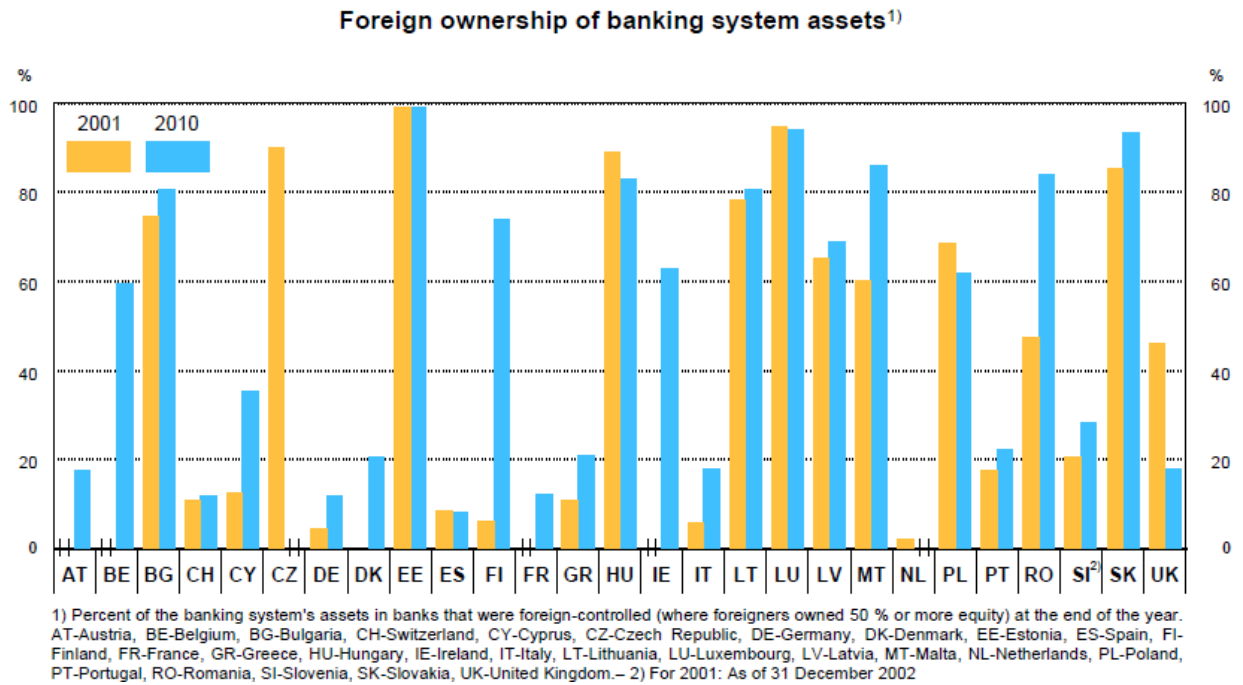
Adopted from Danske Bank (2013)

Figure 1: Foreign liabilities and debt overhang



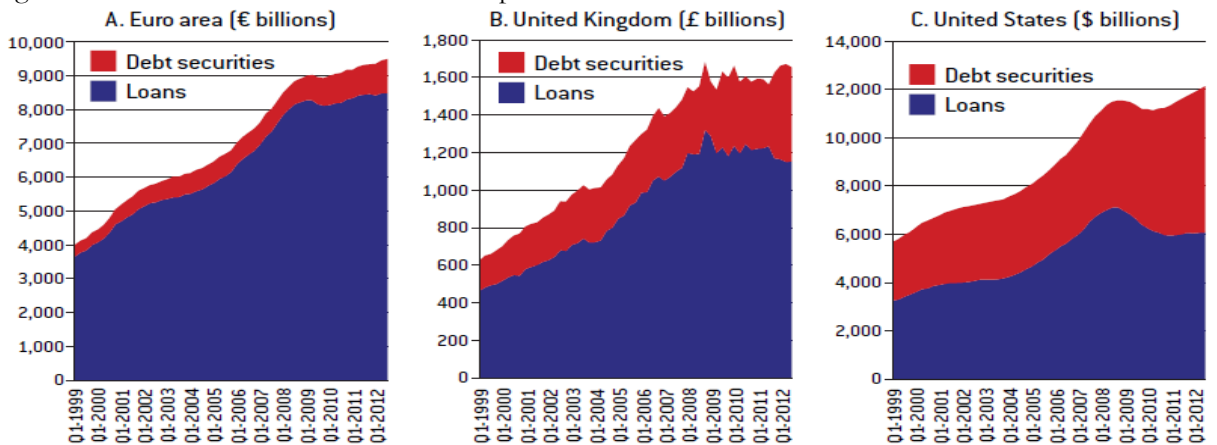
Adopted from Danske Bank (2013)

Figure 2: Foreign ownership of banking system assets



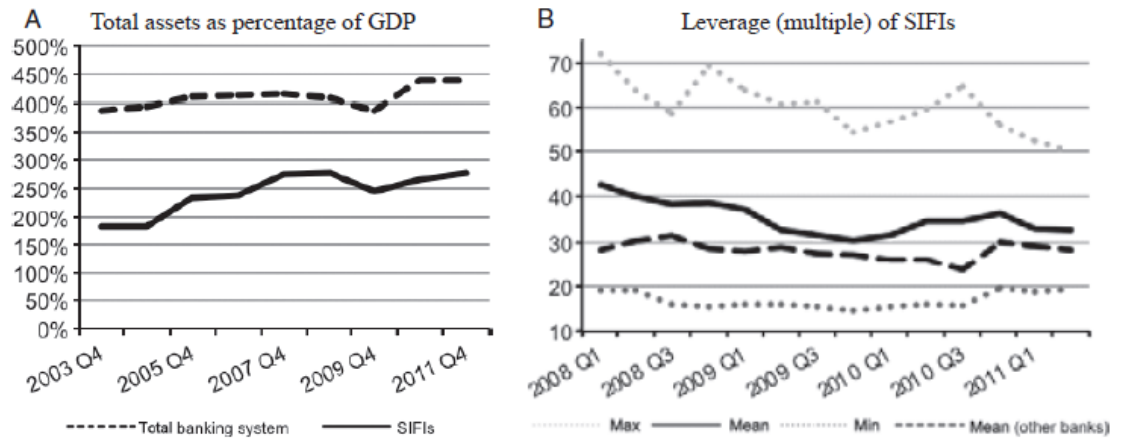
Source: Buch, Körner and Weigert (2013)

Figure 3: Debt-liabilities of non-financial corporations 1999-2012



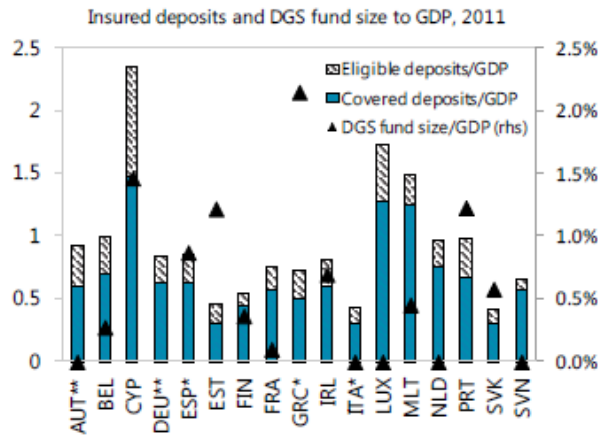
Source: Darvas (2013)

Figure 4: Size and leverage of the German banking system with accent on systemically important financial institutions' expansion



Source: Dombret and Ebner (2013)

Figure 5: Divergence in EMU's DGSs' Capacity



Source: IMF (2013)

Table 2: Characteristics of EU DGSs 2012

	Austria	Belgium	Cyprus	Estonia	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Malta	Netherlands	Portugal	Slovakia	Slovenia	Spain	Bulgaria	Czech Republic	Denmark	Hungary	Latvia	Lithuania	Poland	Romania	Sweden	UK	
Type of Deposit Insurance Scheme																												
explicit	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
legally separate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
within central bank																												
within banking supervision agency																												
within Ministry of finance																											x ^{2/}	
Participation and Coverage																												
domestic banks	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
local subsidiaries of foreign banks	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
local branches of foreign banks	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
foreign currency deposits	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
interbank deposits																												
Payouts to Depositors																												
per depositor per institution	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Funding																												
ex-ante fund		x	x	x	x	x	x	x	x			x		x	x		x	x	x	x	x	x	x	x	x	x	x	
ex-post scheme													x ^{2/}															
funded by government	x												x ^{2/}														x	
funded privately	x	x	x	x	x	x	x	x	x	x	x	x	x ^{2/}		x ^{4/}		x	x	x	x				x	x	x	x	
funded jointly													x ^{2/}										x					
guarantee from government in case of a shortfall of funds 6/	x		x	x										x	x	x		x	x	x	x					x		
Contributions and Assessment Base																												
risk-adjusted premiums						x	x		x						x												x	x
assessment base																												
covered deposits	x				x																						x	
eligible deposits		x	x	x		x	x	x						x	x		x	x	x		x	x	x			x	x	
total deposits									x																			

Notes: Table excludes voluntary and contractual schemes other than the national statutory scheme.

1/Swedish National Debt Office.

2/In 2011, the Netherlands adopted a regulation to transform its ex-post DGS into an ex-ante funded scheme with risk-based contributions, to come into effect on July 1, 2013.

3/The Dutch Central Bank administers the scheme and pays out the depositors. The costs of the scheme are transferred (including the administrative costs) ex post to the members of the DGS, subject to an annual cap of 5% of own funds of each member.

4/In case of a bank failure, the Bank of Slovenia temporarily assumes the obligation to pay the guaranteed deposits and then calls on other banks to contribute funds needed for the paying out of insured deposits. To ensure banks have sufficient liquid assets to contribute such funds, all banks are required to invest a minimum of 2.5% of insured deposits in debt securities that are eligible for the collateralization of Eurosystem receivables as defined by Bank of Slovenia.

5/Initial contribution to the DGS fund provided by Banco de Portugal.

6/In the case of a shortfall of funds, the DGS can issue bonds/receive loans guaranteed by the government.

Sources: European Commission, International Association for Deposit Insurers, Financial Stability Board, and national deposit insurance agencies.

Adopted from IMF (2013)

Table 3: Top 25 Banks in the EMU (ranked by assets)
Banks (2011 figures)

		Total assets (EUR bn)	Tier 1 capital (EUR bn)
1	Deutsche Bank (Germany)	2,164	49
2	BNP Paribas (France)	1,965	71
3	Crédit Agricole (France)	1,880	62
4	Banco Santander (Spain)	1,251	62
5	Société Générale (France)	1,181	37
6	Groupe BPCE (France)	1,138	41
7	ING Bank (Netherlands)	961	39
8	UniCredit (Italy)	927	43
9	Rabobank Group (Netherlands)	732	38
10	Commerzbank (Germany)	662	26
11	Intesa Sanpaolo (Italy)	639	37
12	Credit Mutuel (France)	605	28
13	BBVA (Spain)	598	34
14	Dexia (Belgium)	413	6
15	Deutsche Zentral-Genossenschaftsbank (Germany)	406	10
16	ABN Amro Group (Netherlands)	405	15
17	Landesbank Baden-Württemberg (Germany)	373	14
18	Bayerische Landesbank (Germany)	309	14
19	Bankia (Spain)	298	13
20	KBC Group (Belgium)	285	16
21	CaixaBank (Spain)	282	20
22	Banca Monte dei Paschi di Siena (Italy)	241	12
23	Hypo Real Estate (Germany)	237	6
24	Nord/LB Norddeutsche Landesbank (Germany)	228	8
25	Erste Group (Austria)	210	12
Top 25 (assets of more than EUR 200 billion)		18,390	713

Source: The Banker top 1000 World Banks (July 2012) and CEPS private database on EU banks maintained by the Financial Markets research unit.

Adopted from Gros and Schoenmaker (2012)

7. References

- Acharya, V.-Steffen, S. (2013), “The ‘Greatest’ Carry Trade Ever? Understanding Eurozone Bank Risks”, NBER Working Paper 19039, Cambridge, MA, May.
- Aizenman, J.-Binici, M.-Hutchinson, M. (2013), Credit Ratings and the Pricing of Sovereign Debt during the Euro Crisis”, NBER Working Paper 19125, Cambridge, MA, June.
- Buch, C.-Körner, T.-Weigert, B. (2013), „Towards Deeper Financial Integration in Europe: What the Banking Union can Contribute?”, paper prepared for the workshop “How to build a genuine economic and monetary union?”, Berlin-Genshagen, May, *mimeo*.
- Burda, M. (2012), “Hume on Hold”, VoxEU.org, May 17th, *mimeo*.
- Buiters, W. (2008), “Can Central Banks go Broke?”, CEPR Policy Insight No.24, Centre for Economic Policy Research, London, May.
- Carmassi, J.-Di Noia, C.-Micossi, S. (2012), “Banking Union in the Eurozone and the European Union”, CEPS Commentary, Centre for European Policy Studies, Brussels, June 12th.
- Danske Bank (2013), “Euro Area Macro Handbook- A guide to the euro area and member state economies”, Danske Bank Research, June.
- Darvas, Z. (2013), “Can Europe Recover without Credit?”, Bruegel Policy Contribution #3, Brussels, February.
- De Grauwe, P. (2011) “The Governance of the fragile Eurozone”, CEPS Working Paper, *mimeo*.
- Dombret, A.-Ebner, A. (2013), “Default of Systemically Important Financial Intermediaries: Short-term Stability versus Incentive Compatibility?”, German Economic Review 14(1), pp. 15-30.
- EBF (2012), “European Banking Sector – Facts and Figures 2012”, European Banking Federation, Brussels, October.
- The Economist (2013), “Europe’s Zombie Banks: Blight of the Living Dead”, Leaders section, July 13th.
- Feldstein, M. (2013), “Coordination in the European Union”, NBER Working Paper 18672, Cambridge, MA, January.
- Gortsos, C. (2012), “Towards a ‘European Banking Union’: The European Commission’s Proposal on the Creation of a ‘Single Supervisory Mechanism’ in the Banking Sector”, Europa Institut, Universitaet Saarlandes, *mimeo*.
- Gros, D. (2013), “EZ Banking Union with a Sovereign Virus”, EUVox.org, June, *mimeo*.
- Gros, D. (2013*), “Principles for European Deposit Guarantee Schemes”, Directorate General for Internal Policies, Part of Monetary Dialogue Compilation, European Parliament, Brussels, July.
- Gros, D. - Schoenmaker, D. (2012), “A European Deposit Insurance and Resolution Fund – An Update”, DSF Policy Paper No. 26, Duisenberg School of Finance, September.

- IMF (2013), “European Union: Publication of Financial Sector Assessment Program Documentation- Technical Note on Deposit Insurance”, IMF Country Report #66, The International Monetary Fund, Washington, DC, March.
- Johnson, S. (2013), “Big Bank’s Tall Tales”, Project Syndicate, May, *mimeo*.
- Malovic, M. (2006), “International Financial Crises”, Faculty of Economics (BU) and NBS, Belgrade.
- Malovic, M.-Marinkovic, S. (2012), “Sovereign Debt Contagion across the EU: Searching for Causes and Mechanics”, in Arandjelovic, Z. and Marinkovic, S (eds) *International Scientific Conference Proceedings “Serbia and the European Union”*, Faculty of Economics, University of Nis, Nis, October 18th, pp. 85-96.
- Malovic, M.-Marinkovic, S. (2013), “Get Over or Game Over: Rise and Fall of the EMU”, *Economic Themes* 51(1), pp. 59-83.
- Mayer, T. (2013), “Democratic Plain Money: An Alternative to Financial Crisis, Inflation and Public Debt”, Veblen Institute and www.eurorettung.org, March, *mimeo*
- Mayer, T. (2013*), “A Copernican Turn for Banking Union”, CEPR Policy Brief #290, The Centre for European Policy Studies, Brussels, May.
- Mody, A. –Sandri, D. (2012), “The Eurozone Crisis: How Banks and Sovereigns came to be joined at the Hip”, *Economic Policy*, April, pp.199-230.
- Münchau, W. (2012), “Politics has undermined Hopes of a Banking Union”, *The Financial Times*, December 17th.
- Sinn, H.-W.-Hau, H. (2013), „The Eurozone’s Banking Union is deeply flawed“, *The Financial Times*, January 29th.
- Soros, G. (2013), ”A European Solution to the Eurozone’s Problem”, Project Syndicate, April, *mimeo*.
- Suarez, J. (2008), “The Need for Emergency Bank Debt Insurance Mechanism”, CEPR Policy Insight No.19, Centre for Economic Policy Research, London, March.
- Veron, N.-Wolff, G. (2013), “From Supervision to Resolution: Next Steps on the Road to European Banking Union”, Policy Brief No.5, Peterson Institute for International Economics, Washington, DC, February.
- Wolf, M. (2011), “Intolerable Choices for the Eurozone”, *The Financial Times*, May 31st, *mimeo*.
- Wyplosz, C. (2012), “On Banking Union Speak the Truth”, *Social Europe Journal and VoxEU.org*, September, *mimeo*.