LENDER OF LAST RESORT IN THE EURO ZONE
WHO WILL STAND UP AND DO THE JOB?

By

Francis Robichaud

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Supervisor: Professor Anil Duman Ph.D

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Abstract

The recent financial crisis has unveiled the necessity to implement a lender-of-last-resort in the euro zone. Owing to the recent awareness about the issue, there is a widespread range new studies, essays and researches covering the red-hot topic. Appropriately, this paper seeks to evaluate the propositions from the scholarly community and the actual solution established by the Member States of the euro area. To do so, the analysis relies heavily on a literature review and to a lesser extent on process tracing. The ensuing outcome distinguishes an optimal theoretical model of the nature of a pan-European lender-of-last-resort. In the end, it seems that a lender-of-last-resort in the euro zone should be centralized, acknowledged by economic agents and supporting a constructive ambiguity. At first glance, the European Central Bank appears to be the best suited institution to fulfill this task. However, the supranational nature of the European Monetary Union requires adjustments to the features of its lender-of-last-resort which precludes embracing the theoretical pattern. As a result, Europe's economic reality entails the inclusion of new standards in last resort lending as the consideration for financial stability.

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INTRODUCTION

The European Union (EU) for the last six decades or so has been on a path of constant integration. Lately, the process has accelerated especially on economic bases. Following the creation of the European Monetary Union (EMU) in 1999, Member States have implemented a single central bank: the European Central Bank (ECB) in 1998. Its performance has been judged acceptable and adequate up until the recent financial downturn of 2008-09 triggered by the housing bubble primarily emanating from the United States. Policy making in the euro zone has been fundamentally transformed by this massive market crush, which has revealed the predominance of financial institutions in the fragile equilibrium that is the global economy.

As a result of the crucial role of macrofinance in our ever more globalized world, in other words the weight of the global financial system (GFS), the nature of economic crises has changed. Legislators need to acknowledge and measure appropriately how to deal best with private or independent financial institutions, systemic inconsistencies and flaws and economic policies. More precisely, at the core of the 'domestication' process is the recovery of the present out-of-control financial market. Indeed, the current excesses have come more than often from the banking world where previously sound credit operations incrementally became gambles, weakening the very structure and foundations of the financial system (Schwartz 2009, 188). Surprisingly, the change in mentalities following the crisis has not occurred; current economic ideologies centered on privatized Keynesianism have not been deeply disputed, questioned and tossed around. Crouch seems to have correctly predicted that the general mindset would not accomplish a significant leap towards responsible corporatism (Crouch 2008, 485). However, his conclusion envisaging an adjustment for a self-regulated privatized Keynesianism has not yet materialized. Notwithstanding the newest regulations implemented, the general situation remains fairly similar to the preceding status quo.

In reality, the allegedly planned electroshock in our understanding of global and national finances has never happened. Insolvent banks, instead of going into default or at least being fundamentally restructured, got bailed out (Carney 2009). The implemented seemingly appropriate reforms, such as Basel III[1], are too narrow and do not seek to cure the predicament but simply address the symptoms (Kapoor 2010). Not a single high-profile figure of the financial world has been judged accountable for negligence or unlawful actions; actually the grand majority are still in office (Morgenson 2011). Consequently, the same organic inconsistencies of the GFS are still jeopardizing the wellbeing of the global economy as before the crisis.

Nevertheless, some competent authorities have been engaging in more essential reorganizations rather than just scratching the surface of the issue. In order to prevent a snowball effect of financial bankruptcies leading to a systematic failure of the euro zone, policymakers have taken substantial steps with the aim of answering the obvious need for a lender-of-last-resort (LOLR) in the EMU. This notion does not represent a major shift in principles but is more a catch-up, a rectification from a pre-existent legislative imperfection. The necessity for a LOLR dates back to the late nineteenth century and it was intended to avoid the disruption of credit in the economy. It would intervene in times of widespread panic with the intentional goal of preventing the collapse of the economy following the struggling of a handful of important financial institutions. A LOLR is not designed to avert private financial failures, though it is the

[1] Most recent set of reforms aiming at new global regulatory standards on bank capital and practices, for more detailed information go to http://www.basel-iii-accord.com/

most common way of ultimate recourse in appropriately dealing with such a critical situation. Thus, bringing about a LOLR in the largest multinational economic zone is not an easy task.

Interestingly enough, prior to the financial meltdown of 2008-09, the euro zone was without a LOLR even though it is a common feature of other Western economies. For instance, the Federal Reserve played an active role of LOLR in the United States which quickly restored confidence in the market. By contrast, in the EMU, it presents itself as a legislative puzzle owing to its unsettled institutionalization process and additional complications related to the current crisis. As a result, the ECB, the forefront EU institution on that issue, has had to deal with a highly heterogeneous amalgam of problems within its scope of authority, namely Member States dealings, crisis management and decision-making independence. It cannot be denied that this has been a real test for the institution and an eye-opener to the imperfections of the Eurosystem.

Since the necessity of a LOLR was considered avoidable at best by EU legislators and policymakers throughout the early prosperous years of the euro zone, the unforeseen financial crisis made the legal implementation of this entity rushed and imperfect. The rushed bailout of Greece marked the beginning of a change in approaching financially troublesome nations in the EMU. Brussels and Frankfurt have established new imperfect rules and institutions, to such a degree that the scholarly community shows divergence on the topic and many concerns have been raised.

Some experts like Otto Steiger and Anne Sibert dispute the unclear role of the ECB in the euro zone’s mandate of LOLR (Steiger 2004; Sibert 2009). Others such as Tracy Alloway criticize the newly appointed institution serving the role of LOLR, namely the European Financial Stability Facility (EFSF) while scholars like Daniel Gros and Thomas Mayer advocate for an alternative solution: a European Monetary Fund (EMF) (Alloway 2010, 2011 ; Gros & Mayer 2010a, 2010b). Uwe Vollmer presents the peculiarity of pan-European negotiations impeding on an optimal outcome in the case of an EMU LOLR (Vollmer 2009). In the end, the recentness of the problem allows for several opinions to spur. So, a research conducted during the immediate aftermath represents a very unique opportunity. There is a necessity, if not an urgency, to comprehend the implications underlying the changes that followed the financial downturn owing to the gravity of this kind of event for the future of the EU itself.

Consequently, many topics still need to be circumspectly examined because the question of the role of LOLR in the euro zone remains a puzzle as of today. The relevant authorities are currently discussing the matter and a final common decision (how to effectively legislate the function of LOLR) from the EU members is far from being concluded. Therefore, the research question of my thesis is as follows: considering the unpredictability of financial markets, what would be a permanent viable solution to the issue of LOLR in the euro zone? The particularity of the EMU holds in its complex structure consisting of several sovereign countries. Thus, two levels of decision-making either merge or collide; national and supranational. Consequently, the spectrum of options is multiplied and the goal here is to look at the different propositions (EMF or EFSF for instance) that have been circulating and the ones actually established in order to make a concise analysis of what is deemed to fail and what shows to be a feasible and workable alternative for the long run and not just for short term purposes.

This research shall bring a contribution to the field by filling a gap in the existent literature and increasing the understanding in the issue of LOLR in the euro zone. The novelty resides in the analysis of the problematic for long term optimal results rather than a short term quick fix. In light of the analysis of the literature and of the development by the EU institutions up to April 20th 2011, it seems that the optimal outcome for the LOLR issue would be to grant such power to the ECB rather than the EFSF. Consequently, the LOLR puzzle would be solved for good and it would be in line with the ultimate aim of the EU: extend the integration of European countries into a single governmental apparatus. As a matter of efficiency, it is essential to implement a centralized LOLR, otherwise loopholes may appear and confusion will impede the reaction to the state of crisis (Steiger 2004, 21; Schinasi & Teixeira 2006, 10). Notwithstanding, it remains unlikely to have this proposition as a concrete outcome, however it may still serve as a guideline for a midway compromise.

The employed methodology in order to properly put together the thesis relies heavily on a literature review. Indeed, it seems to be the most effective method of data collection combined with an in depth analysis of concepts, institutional designs and political constraints linked to the puzzle of the LOLR in the euro zone. Due to the nature of the subject, it is essential to differentiate what is from what “ought to be”. Consequently, the research will use a mix of positivist and normative approaches on economics. Moreover, as a lagniappe to the literature review, interviews have been conducted with staff members of the ECB. Those elite interviews will allow proceeding to process tracing i.e. to evaluate theories of political science. Indeed, from the underlying microfoundations of LOLR theories that are found in the literature one may potentially be properly matched with intervening factors.

Besides the main question, this paper will cover sub-questions in order to deconstruct the issue in more intelligible sections. The body of the study will be articulated around five main sections each of which will answer a specific aspect of the research question. First, on a more conceptual ground it is essential to see why a LOLR is needed. What theoretical notions support the establishment of a LOLR in the euro zone? Second, given the atypical structure of the EU, what constraints are arising from the coexistence of Member States in the EMU context hampering the institution of a usual LOLR? Third, since currently the EMU is in a post-crisis state there is a temporary solution implemented: the EFSF. In regards of its institutional setup and functions, it will be shown why the EFSF is merely enough and is ill-designed as a LOLR to safeguard the euro zone from future financial downturns. Fourth, considering the diverse propositions bursting from the literature it appears relevant to evaluate their feasibility. Suggestions coming out frequently are the creation of the EMF or the possibility of sovereign default. Therefore, it will be displayed why and how the EMF is wrongfully thought through and what is inconsistent with sovereign default. Finally, while keeping in mind the conclusions of the previous sections it becomes indispensable to assess the place of the ECB on this controversial issue. From this will emerge an analysis centered on what role the ECB should assume regarding the purpose of LOLR of the euro zone.

Chapter 1: THEORETICAL GROUNDS FOR A LOLR

A Central Bank's (CB) activities and responsibilities have been in constant evolution since its first appearance in the seventeenth century. All along the rollercoaster that are business cycles punctuated by peaks of growth and decline, governments have sought mechanisms to smoothen the repercussions of fast changing fluctuations affecting the stability of the market structure. In times of severe economic shock or panic, the ultimate recourse to avoid witnessing money becoming worthless is the provision of LOLR usually assumed by the CBs.

1.1 Bagehot Principle and Financial Crises

At the outset, the idea of injecting fresh money into the economy through failing institutions sounds preposterous, however the underlying reasoning makes sense. The first rationale introducing the concept of LOLR stems from Walter Bagehot of the Bank of England who claimed CBs needed to recognize their responsibility to backup the market when it is going through times of hardship (Bagehot 1873; Redish 2001, 6; Wood 2003, 343; Vollmer 2009, 60; Ehnts 2010). The previous statement is an outline of the Bagehot principle which provides a starting point in the discussion about why a LOLR is needed and what theoretical notions support the establishment of a LOLR in the euro zone. Notwithstanding over a century of divided standpoints on the issue, past and recent events have shown the *raison d'être* behind this proposition.

Again, the main goal observed by the role of LOLR is to prevent bankruptcies of systemic crucial financial institutions possibly triggering a general collapse of a national economy or the GFS. The very existence of a LOLR has been cross-examined from several angles and for the adherents of the Chicago school the lack of a LOLR encourages financial institutions to self-regulate themselves by making the necessary adjustments in order to steer clear of financial disarray (Berger & Hefeker 2007, 373). Empirical evidence supports this claim, although only in few cases such as the Canadian banking system of the nineteenth century which stood strong before panics up until the introduction of central banking practices (Redish 2001, 23). However it remains an exception due to the fact that Canada has developed and maintained a very conservative culture in the bank industry (Anand 2009; Cole 2009). Elsewhere in general, the trend has been rather focused on the other end of the spectrum: risk taking. Moreover, the use of a LOLR has less to do with preventing crises and more with healing the wounds.

Consequently, a broader analysis of historical responses made by LOLRs seems appropriate to establish the soundness for the implementation of this function. Fortunately, Kindleberger has completed such an investigation. Without going into detail, one of the general finding from this inquiry is that: "a lender of last resort does shorten the business depression that follows financial crisis" (Kindleberger 1989, 233). His research shows that in the last three centuries crises devoid of a LOLR (1720, 1873, 1882, 1890, 1921 and 1929) presented harsher aftermaths. 1873 and 1929 even ended up being Great Depressions. So, the liquidity shortage afflicting the market needs to be countered by exceptional measures embodied by the actor assuming LOLR duties. Things get complicated here since a primary conundrum arises.

1.2 Fundamental Riddle: the Moral Hazard

With the institutionalization of a LOLR follows inevitably a distortion in the actors' deeds. Indeed, this alteration is exemplified by the term 'moral hazard' which states that shielding a party from risk will invariably change its behavior compared to how it would behave lacking security. Financially speaking, the matter is essentially intertwined with risk-taking. In other words, the function of LOLR unavoidably creates a situation where the scenario that is deliberately sought to be avoided is actually emphasized. While central authorities pursue to rescue financial institutions destabilized by hazardous risk-taking: “the very existence of a safety net [LOLR] may encourage imprudent behavior on the part of credit institutions” (Steiger 2004, 23). Accordingly, the implementation of a LOLR within an economic entity has to be properly managed in order to reduce as much as possible the counter effect resulting from the existence of an ultimate lender.

Notwithstanding the moral hazard, governments have generally adhered to the benefits of introducing a LOLR. It is understood that the common set off of a financial distress holds in loss of confidence (Kindleberger 1989, 116). Consequently, without any ramparts securing the precipitated fall, the situation may only worsen. The most recent crisis would have degenerated further lacking governmental and central banking support, i.e. a disastrous domino effect of bankruptcies in the financial market hampering growth and investment in the long run. In reality, private financial institutions, which fabricated their own breakdown, were unable to solve their gruesome creation and desperately needed states to intervene (Schwartz 2009, 192).

In the era of the predominant GFS the question of whether or not to implement a LOLR in regards of moral hazard is outdated. The issue has slightly shifted to the extent which role of LOLR may be legislated and assumed. Moral hazard remains highly relevant to be maintained into the equation. These days, the problem is to be found in whether a CB should acknowledge its duty of LOLR ex-ante or ex-post to time *t* when banks find themselves unable to manage credit demands. Furthermore, in both cases the degree and style of intervention is particularly pertinent to the implications imposed by moral hazard. Moral hazard continues to be a systemic irregularity emanating from the lending-borrowing format. However, the manner with which it is dealt has evolved.

The conceptualization of moral hazard is furthermore complicated by two notions sprung up by the predominance of the financial market in today's world economy. First, the level of complexity intrinsic to financial transactions and accounting blurs the line between illiquidity and insolvency. In practice, an institution that receives financial aid from a LOLR is facing a liquidity crisis. "A liquidity crisis is a situation where financial institutions are fundamentally sound, but find it difficult to roll over existing debt because of adverse conditions in the financial markets" (Ehnts 2010). The financial meltdown of 2008-09 has shown that illiquid banks come to be due to holding short term liabilities and long term assets to a point where the latter cannot cover the former. The problem arises from the fact that this combination usually makes banks first illiquid and later insolvent at some point in time following questionable investments filling the bank's portfolio with toxic assets. It is even more challenging to differentiate illiquidity from insolvency when a country requests help from a LOLR as in the euro zone (Schmiedel et al. 2010, 8). Either for banks or states, guaranteeing the safeguarding of insolvent entities will ultimately seriously compromise the wellbeing of the financial sector by rendering some players virtually immortal (De Cecco 2003, 3). While illiquid banks deserve to receive temporary help, insolvent ones should be allowed to fail. On the other hand, the situation seems unlikely for national countries, but also for massive private actors on account of their magnitude on the system *en bloc*.

Second, the increasing concentration of financial actors in the GFS produced banks that operate on such a large scale that their failure alone would endanger the system as a whole. The argument that: "the absence of a LOLR unambiguously increases prudential efforts undertaken by private banks" (Berger & Hefeker 2007, 388) is obsolete since it neglects the existence of private entities vital for the sustainability of the market. This problematic echoes all the way to Axel Weber, former president of the Deutsche Bundesbank since April 2011, who claimed that:

[i]f institutions are too big to fail, they are too big to exist" (Carrel et al. 2011). Certainly, the concern growing from too-big-to-fail institutions brings in a new dimension to the moral hazard owing to the removal of the Nash equilibrium. Therefore, not every bank holds equal chances of being rescued by a LOLR entity, making them act disorderly. Indeed, too-big-to-fail ('too-fat-to die' might articulate better the inconsistency behind a system bearing such elements) banks have no incentives in engaging in prudential efforts ensuring safe inner banking practices. Again, this apprehension may correspond equally with Member States of the euro zone.

Taking into consideration the twist on moral hazard by too-big-to-fail banks and the almost indistinguishable character between illiquidity and insolvency, bank efforts such as safe lending policies or responsible monitoring have to be conceived differently. Previous assumptions just do not fit into models anymore. For instance, theoretically the more banks there are (large N) the less likely it is for a bank to receive aid from its CB for the reason that the level of effort augments when the economic failure of one player does not pressure an *ensemble* of numerous other players (Berger & Hefeker 2007, 381). This literature, being from the pre-crisis period, misses out on the centralization and merger of banking operations. The word of order was and actually remains 'more risk equals more profit'. Bank effort was beforehand considered effective under private management, whereas it has become clear that reckless large scale banking demands some minimal intervention of the state in the form of a LOLR. The recent crisis in the euro zone empirically reinforces the need for a LOLR since the function was missing and bank effort actually got worse. Berger's belief that: "financial integration need not lead to a 'race to the bottom' [in bank effort]" (2007, 384) shows to be wrongfully presented. Current banking habits have modified the rules of the game. In the end, the outright issue of moral hazard seems to have no overall perfect solution; still diminishing the imperfections of a CB's response to a financial crisis needs to be sought on solid grounds.

1.3 Suboptimal Situation

The pre-existing setting of the EMU regarding LOLR proved to be poor if not counterproductive for the euro zone. Within the single financial market, despite the integration tendency, last resort lending remained in the hands of National Central Banks (NCBs) (Schinasi & Teixeira 2006, 7). This has seemed to be undermining the EMU as the reply to the credit shortage did not even come first and foremost from NCBs. Having 17 LOLRs (one for each euro Member) inescapably brings about conflicts of interests. Expressly, NCBs might be keener on rescuing a national banking institution over a pan-European or foreign one creating adverse monetary effects (Steiger 2004, 22). Centralization of LOLR operations appears more legitimate and justifiable as it treats the EMU as a coherent aggregate. Otherwise: "decentralized lender-of-last-resort policies may create an uneven playing field and introduce different levels of moral hazard across EMU" (Adams 1998, 110). Still: "[t]he performance of the lender-of-last-resort function is [...] a national responsibility" (Schinasi & Teixeira 2006, 6).

Although times have changed, the fast moving EMU has evolved to a point where NCBs can no longer play the role of LOLR: "not only commercial banks but also the central bank can run into bankruptcy" (Heinsohn & Steiger 2002, 7). NCBs represent political constructions i.e. Member States while the economic integration is far greater than the political integration. The existence of a pan-European banking group renders archaic and ineffective distinctive national LOLRs. Indeed, the activation of the LOLR function in one country will generate cross-border externalities affecting other NCBs (Schinasi & Teixeira 2006, 15). Acknowledging those spill-overs will not resolve the predicament but rather make matters worse a NCB might be reluctant to engage in LOLR maneuvers by deeming itself not to be the one among many to intervene. Subsequently, delays and confusion will impede the well-functioning crucial duty of LOLR in the euro zone. Even the IMF and the Bundesbank have recognized that in case of a crisis it implies a decentralized and uncoordinated action by the euro zone NCBs (Steiger 2004, 21-26).

Moreover, it seems the pre-crisis setting apparently was even more perplexing and hazy. At the supranational level, the ECB was focused on fulfilling the mandate of a narrow central bank, i.e. concentrated primarily on price stability. Nevertheless, signs of concerns for financial stability were already perceived prior to the crisis with the establishment of an Emergency Liquidity Assistance (ELA) which refers to a: "provision of liquidity to the financial system as a whole through market operations" (European Central Bank 2003). Both responsibilities of LOLR and ELA seek to restore financial stability by injecting cash into financial institutions that are illiquid at the moment. However, the former is characterized by a highly conditional lending coupled with a penalty rate (Wood 2003, 343). Moreover, this action is exclusively undertaken when the financial institution in jeopardy has exhausted all other possible options to improve its liquidity. The latter relates to a global market operation where money is injected in the entire system rather than to an individual actor such as a bank. Furthermore, ELA does not require to be executed as an ultimate recourse. In practical terms, the distinction between the two is quite narrow since ELA was not or has not been exercised[2] in decades while the LOLR is becoming more and more common practice. Principally following the recent crisis, the ECB has actually deviated from its usual path and now engages in activities closer to the ones of a LOLR rather than ELA. Anyhow, by acknowledging the duty of LOLR while rejecting the mandate of LOLR

[2] Some articles refer to bailouts in the euro zone as ELA operations; http://ftalphaville.ft.com/blog/2011/02/09/483221/where-did-irelands-secret-liquidity-go/. So the ambiguity between the two concepts is still open to debate

(Norbeth & Bergheim 2008, 1), the ECB has contributed to creating a blurry framework on matters of LOLR.

Taken as a whole, the EMU strategy *vis-à-vis* the role of LOLR has been to cultivate a constructive ambiguity: “mean[ing] that the LLR acts in such a way that private financial firms cannot deduce whether it will intervene or not in a future situation from its past conduct” (Aglietta 1999, 26). This assertion is simply based on common sense; a LOLR should not publicize its set of rules regulating its mandate, or else private actors will take advantage of the situation and figure out *ex ante* actions of the LOLR. In the euro zone, the model has been erroneously applied since the ambiguity resides in the provision of responsibilities rather than in the conditions in which public support is provided to private institutions in financial disarray (Schinasi & Teixeira 2006, 15). By not establishing a clear LOLR, the EMU did not enhance microprudential behaviour from financial institutions. Indeed, the recent crisis shows the obvious failure in the constructive ambiguity à la euro zone. This vision of last resort lending is in fact a rough copy paste from the Bundesbank, which does not explicitly acknowledge its duty of LOLR (Steiger 2004, 23). Perhaps, what is good for Germany is not always suitable for Europe.

While the LOLR should be plainly recognizable, its methods and rules need to be kept in the dark. No guideline can be laid down and operated on all Member States of the euro zone. Consequently, rules have to remain concealed and only when the LOLR judges it necessary to intervene should it expose its personalized plan to the entity in jeopardy. At the end of the day, a LOLR acts in concordance with principles: “of monetary sovereignty for the sake of overall financial stability” (Aglietta 199, 27). Therefore, the implementation of a LOLR requires as well coordinated macroprudential policy aiming at preserving financial stability.

1.4 Form and Features of an EMU LOLR

In light of the theoretical constraints and actual design of the European Financial Single Market (EFSM), the role of LOLR is circumscribable within a certain legislative outline. Its structure has to be centralized by contrast to the current decentralized uncoordinated system of national LOLR (NBCs). State authorities failed to address the problem and are no longer appropriate bodies for LOLR operations. By consolidating the power at the core, coherent responses to external shocks are improved and supranational crisis management ignores border issues and produces better response schemes to a pan-European economic downturn (Schinasi & Teixeira 2006, 18). Furthermore, the LOLR needs to be fully receptive of its duties prior to generalized money hardship. No need to detail its agenda and policies publicly; transparency is not an issue until the LOLR has to interfere, thus it is an *ex post* concern (Vollmer 2009, 66). Avoiding open and free information on a last resort lender's intentions seeks to minimize the moral hazard, that is to say, the distortion of the actors' behaviour.

In line with the previous argument is the constructive ambiguity which must stay exclusively about conditionality and specificities. Indeed, rejecting to identify unmistakably the EMU's LOLR has caused harmful uncertainty to financial institutions. Even without the LOLR provision, banks have engaged in dubious practices and shockingly the status quo remains in banking customs following the economic catastrophe (Murphy 2010). The euro zone holds more authority and weight by evidently implementing a LOLR with broad directives but no further. For this reason, detailed components always stand at issue; however public authorities may recognize the existence of harsh conditionality, severe penalty rates, political reprisals, imposition of external supervision and so on while retaining to divulgate whether or not it will intervene (Aglietta 1999, 26). Moreover, an effective LOLR needs to be backed up by European wide supervision initiatives. This will allow EU institutions to answer quicker in times of necessity since the line between illiquidity and insolvency will be easier to spot and too-big-to-fail institutions may be contained to avoid contagion. Only then may reckless banking be fought correctly: through the modification of the rationale more risk equals more profit. However, the political structure of the EU imposes limits on the implementation of an efficient LOLR. Besides abstract borders such as moral hazard and constructive ambiguity, the role of LOLR faces constraints which divert what it is from what it ought to be.

Chapter 2: EMU CONSTRAINTS

Consequently to the preceding theoretical assumptions made, the LOLR in the EMU should by and large be centralized, i.e. evolving at the supranational level, fully aware of its public responsibility which is acknowledged throughout the community and cultivating constructive ambiguity so to keep details of the procedure in the dark. An appropriate *mélange* of those attributes would supposedly bring about the finest institution to act as a LOLR. However, the 'abstract to palpable' transition is not one of smooth sailing. Indeed, the geopolitical and economic realities drawn in by Europe's situation represent an unpredictable conflation of ideas and interests. In the end, policymakers juggle with old concepts applied to new contexts giving way to suboptimal outcomes.

2.1 Redefining the LOLR Concept

In general, the role of LOLR is endorsed by a country's CB as in the United States, Japan, Canada and Australia. Accordingly, the ECB should be the 'designated driver' for the euro zone's LOLR task. Yet, the Frankfurt-based institution has not been too keen on identifying itself as the entity assuming this function. Nor has there been any clear recognition of a usual LOLR prior to the financial crisis. In simple terms, the difficulty behind finding the real LOLR on the old continent comes from the very existence of the EU, namely that it is an ongoing fusion of self-governing nations. Since sovereign states constitute the highest level of authority legally speaking, there is bound to be friction between Member States of the euro zone resulting in unproductive outcomes or even joint decision trap[3] cases. When it comes to a pan-European facility of last resort lending, the repercussions tied to its implementation will provoke national anxieties obstructing the typically uneventful journey that is the acknowledgement of a LOLR in

[3] The joint decision trap is a situation where interdependent government decisions have to be adopted at the lowest common denominator.

a market economy. Thus, it becomes relevant to seek what constraints are arising from the coexistence of Member States in the EMU context hampering the introduction of a usual LOLR. Some hurdles are the product of barely covered backroom politics such as the constant Franco-German struggle for the EU's upper hand. But even more problematic are the inherent systemic hindrances, namely the tricky sovereign debt situation and pan-European banking firms.

A fundamental aspect of the aggravation of the recent financial crisis is found in the mutation of privately owned debt into public liability. This reality is the quintessence of the lengthiness in solving the European financial disarray; primarily toxic assets in banks were transferred to the public authorities' financial books. Although, this change has been a common feature across the globe during the last crisis, the supranational nature of the EU raises the issue of transnational bailouts, where in essence a nation is financially rescued by its neighbours. Even the banking sector admits this embarrassing truth as Willem Buiter, Citigroup chief economist, puts it: "[o]ne crucial problem that concerns the eurozone [is] the "migration" of private-sector liabilities onto public-sector balance sheets" (Oman 2011). While the issue was first a topic of illiquidity or insolvency in the financial sector, now it is transposed as a question of sovereign debt. The problem shifted to the willingness rather than the ability to pay back and limitations became of political nature instead of being purely economic (Obstfeld 2009, 20). It leaves no doubt that dealing with public debt financing made matters worse for the long term recovery of the EMU.

Moving the maturity mismatch into the hands of a state definitely creates a headache for legislators and central bankers. Indeed, the end result of a country going into default is far more detrimental and widespread than a financial institution declaring bankruptcy (whatever its size). The EMU could go berserk and having a nation running into default would cause harm to the union as a whole. The practical effects of sovereign default will not be discussed further as of now since they will be treated more extensively in chapter 4. As for the LOLR definition, the challenge contained in sovereign debt holds in the near zero possibility of letting an EMU country going broke (EU solidarity clause). Not only is constructive ambiguity severely scratched but the whole meaning would have to be thought over. Mr. Gabriel Glöckler, Deputy Head of Division DIV EU Institutions & Fora at the ECB, summarizes rightly the contradiction in terms:

> We are a Central Bank, we have one mandate that is to provide price stability. We are not here to finance governments. […] Would you like a Central Bank to finance governments temporarily? I do not think that is a good idea, it is forbidden by the Treaty [TEU] because that means that the government can always turn to the Central Bank and ask to print more money just to help it spend. If you do that, you only drive up the price level and inflate the amount of money in the economy. The only thing that happens is high inflation. It can lead to Zimbabwe (Interview at ECB 2011)[4].

In other words, the ECB cannot assume the role of LOLR of the EMU if the terminology of LOLR encompasses bailing out a European public apparatus. Otherwise, it would represent a major *volte-face* in the tradition of central banking and an incongruous drawback from the usual power separation between governments and monetary policy. This is absolutely true in view of the fact that moral hazard would be virtually infinite: every state could afford risky public finances (private institutions as well considering they would be rescued by their national authorities) owing to its capacity of bailing out itself through the ECB. Here the issue at stake does not seem to be whether a LOLR shall intervene regarding sovereign debt crises but rather how to avoid the transfer of private debt to the tax payers. In this respect, Europe faces a greater challenge since the burden may potentially be transferred onto citizens of another country within the Union.

[4] The interview was conducted by the author of this thesis

Another element distorting the long-established definition of a LOLR in the EMU appears to be the proliferation of pan-European banking groups. Following the trend of globalization, private institutions have been on a path of excessive mergers and acquisitions, especially in many domains with finance as the nucleus element (Schwartz 2009, 49). These operations have not only reduced the number of players, each player has become larger and riskier on account of an unbearable strategy of short term debt coupled with long term profitability. The private sector engaged into a high level of integration while the public structure has remained restricted to its national boundaries. Governments slowly happened to be disconnected from the market reality or are simply powerless before the predominance of certain actors (too-big-to-fail type). The reorganization of European banking has led to the point where linkages and cross-border transactions benefit foreign ownership of financial assets (Schinasi & Teixeira 2006, 5). As a result, a vital industry such as banking falls into the hands of foreign decision-making. Thus, it demands a strongly centralized and supranational LOLR for the euro zone altogether. The pre-crisis setting seems unsustainable for the reason that NCBs cannot control appropriately the spillovers of trans-European banking. “The internationalization of firms’ financial operations has blurred the lines of responsibility for national lenders of last resort” (Obstfeld 2009, 5).

Not only do banking conglomerates across Europe make it difficult to judge which jurisdiction they fall under, they also understand the significance they hold within the financial system. Over the past few decades, credit has taken more and more place in the economy. Nowadays, actors in that field tend to be large and no more than a handful. In the high spheres of banking, early on it was understood that their own survival was imperative for the system in its entirety. It is to say, the failure of a major institution would have triggered a generalized financial distress owing to the informational asymmetries and negative externalities (Obstfeld 2009, 6).

The former refers to the blurriness surrounding the aftermath of a bankruptcy as to which counterparties are accountable or at risk of heavy losses. The latter corresponds to the social cost of the liquidation of a firm which is not assumed by the bankrupt company itself. Even more perplexing has been the legislators' and central bankers' lack of foresight. The last economic meltdown proved the decisive impact of financial stability in Western economies. However, governments: "did little to prevent the build-up of the asset bubbles that triggered the financial crisis […] the obsession with inflation blinded them to dangerous trends in banking" (Carrel et al. 2011). Subsequently, the EMU suffered from the lateness of implemented remedies such as bailouts and austerity measures. The LOLR (or its equivalent to carry through sovereign debt management) needs to take into account financial stability. Howbeit, by contrast with price stability, financial stability remains a concept that is hardly measurable. About it, Mr. Glöckler explains clearly that: "[w]e do not have a full understanding of financial stability. What kind of instruments we need in order to actually guarantee it. For as long as we do not have that we are in a pretty grey zone. […] We do not have a model to stick it altogether to give us a coherent analytical framework of understanding how these things interact" (Interview at ECB 2011). The point made by Mr. Glöckler is that at the moment the knowledge accumulated on financial stability does not allow for an institution, for instance one fulfilling the role of LOLR, to guarantee the safeguarding of financial stability. In other words, common sense guards us from holding accountable a public entity for this task.

The fact that a European LOLR in order to be efficient needs to somehow encompass financial stability measurements is clear in terms of purpose but to get there the euro zone has to go through a winding path. The main problem obstructing a potential LOLR to act accordingly is the disparity between economic and political integration. The European economy is already at the stage of a single currency market with deep interconnectedness between its economic agents. Not to mention that several economies in the EU are not part of the EMU; however they remain acutely intertwined with the euro zone. To avoid contagion actions are taken even at the periphery outside of the Eurosystem as when the ECB provided 5 billion euro of ELA to Hungary in 2008 for the sake of financial stability in the region (New Europe Weekly 2008). Meanwhile, the political arena is still dominated by nation-states that operate a system with archaic instruments as if they attempted to repair a rocket with sticks and stones. “EU institutions were not equipped to handle the crisis so the first response had to be led by Member States” (Kapoor 2011). Undoubtedly, the EMU was not ready at the supranational level to face the financial crash ignited in 2008. The EMU’s universal approach in macroeconomics created credit variations between the core and the periphery of the Union. Therefore, countries such as Ireland were able to borrow at low rates owing to the weight of Europe’s engine (Germany) into the scale of interest rates of the euro zone. The line of attack is appealing, except that it ruthlessly backfired. Soon enough, the Irish finances entered a phase where they were short on cash, thus illiquid (Murphy 2010). Reactions to financial distress must be improved so as to reconcile the matured economy of the euro zone with its infantile political order. Obviously, a mandate to oversee and gauge European financial stability appears desirable (Carrel et al. 2011). Not only does the fulfillment of this function seem complex, but legislating on it would require a high level of coordination by Member States.

2.2 Political Involvement

Even though some EU institutions are dedicated to the economy, they are already politicized and the tendency is increasing. The political input, albeit remote and limited, still has a significant impact on the efficacy of the institutions concerned. In cases of consensus, then the outcome is favorable for the EMU. By contrast, a disagreement between countries inevitably leads to a suboptimal upshot. Struggles within the euro zone are actually easily identifiable owing to the disproportionate weight and influence of nations. Surely, Slovenia cannot impose its vision to more heavily populated states such as Spain or Italy. Moreover, traditionally the pulling occurs between Germany and the Hexagon. Respectively first and second powers of the EU and EMU, they usually dictate the course of Europe politically and economically. It is France that pushed for a decentralized Eurosystem (Steiger 2004, 25) which ultimately revealed systemic shortcomings. The reluctance to engage more promptly on a pro-integration ideology shaped the incongruity observable today between a progressively more intertwined economic and financial system and a still old-fashion divided political arrangement.

Endless negotiations are a direct corollary to stationary politics and in due course decrease the efficiency of the political process. Perhaps the best illustration of this is the Eurosystem solution to the nonexistence of LOLR in its economic creation. Rushed negotiations on the second weekend of May 2010 resulted in an agreement providing a LOLR (European Financial Stability Facility 2010) in place for solely three years, not quite centralized as an EMU organization nor emphasizing constructive ambiguity, namely the EFSF. Details about the EFSF will be discussed amply in chapter 3. The point here is to demonstrate concretely the wastefulness and inadequacy behind a dispersed political apparatus for questions needing a federalized or centralized answer.

Another constraint inherent to the EMU is its recentness. After all, the euro is barely more than a decade old and the institutions related to it, even though they have had a good record so far, did not amount enough credibility and reputation to carry out last resort lending in the Eurosystem. The lack of hindsight in designing the euro zone against severe financial catastrophes has weakened the likely response to secure investment and development. Thus, in order to comfort private agents in troublesome times, the EU had to reach for external help even if this sounds preposterous for an *ensemble* of strong and middling economies such as the euro zone. Still, because the EMU had never faced prior to 2008 any hardship it was required, against its will, to call up for assistance from abroad. Surely: "[i]nvolving the IMF signal[s] weakness on behalf of the EMU to put its house in order (Arghyrou & Tsoukalas 2010). The fact that Washington gets into European affairs in times of peace is a peculiar event. Owing to the current circumstances the most viable solution at the outbreak of the crisis was indeed to invite the IMF (Pisani-Ferry & Sapir 2010). Europe would have rather dealt with its issues on its own, but restoring confidence was essential. Mr. Glöckler explains that these extraordinary times necessitated a resolution from which people would recognize the format.

> The only way to bring certainty back into the market is to say it is going to be like the IMF, do not worry everything we will do is just like you know it […] It is not that Europe invents something totally new that you do not know […] The first best solution is not to have the IMF involved but the situation as it has evolved is a path dependency, the IMF must be in, that is the only way, we are on a path and the IMF stays involved (Interview at ECB 2011).

In substance, the IMF's involvement is some sort of necessary evil: its participation shows trustworthiness and seriousness. On many occasions, the IMF has been compared to some kind of international LOLR (Knedlike 2010; Obstfeld 2009; Cline 2005). Its materialization remains improbable due to the current global state of affairs in terms of currencies and asymmetrical economies. Nevertheless, having the IMF associated with the function of LOLR in Europe is to a certain extent upsetting for the Union. By tradition, the EU is fully independent in its decision-making and action-taking. Permitting foreign contribution diminishes the European autonomy and hampers the centralization aspect of a LOLR. The EMU could have analyzed previous experiences in monetary unions and recognized at least the necessity for the existence of a LOLR operating at the supranational level as it was concluded in the aftermath of the 1997 Asian crisis (Mishkin 1999, 714).

At the end of the day, it seems obvious that aspects of the EMU generate a deviation from the theoretical LOLR. Sovereign debts are tremendously tricky as on one side they threaten the Eurosystem economy, while on the other a LOLR cannot logically bailout public finances. Conceivably, avoiding the mutation of private toxic assets into public debt would be a proper step to make. Regardless of this assumption, the issue is still pending; how to reconcile the function of LOLR in an environment enabling private institutions and governments to go into default? Moreover, a fundamental problem in connection with constructive ambiguity takes place with the mounting gap in economic governance (Kapoor 2011). This mismatch helped to give birth to pan-European banking groups that are seemingly almighty *vis-à-vis* the relevant authorities. Needless to say, a LOLR becomes powerless in this scenario following that it is unable to enforce reliable conditionality. Furthermore, subsequent to the existence of too-big-to-fail firms, EMU institutions disregarded a crucial element in today's economy, namely financial stability (Murphy 2010). No matter how complex and broadly defined financial stability is, it needs to be taken into account by EU bodies working on the wellbeing of the monetary union. An effective LOLR would depend upon valuable information such as what was previously mentioned to acknowledge hazardous trends or behaviors menacing the economy as a whole.

Again the EMU's ability to incorporate financial stability control as part of a LOLR entity is grandly restricted by the political conflict between Member States. Actually, national governments generally agree to postpone crucial surrendering of power to supranational institutions. So, political involvement (close to a deadlock) here is unwanted since it reduces the likelihood of a European LOLR with macro-prudential tools to supervise the EMU economy. Without this capability, the LOLR appears feeble since no preemptive measures or warnings may be released. Indeed, the current state of the economy demands that the role of LOLR be broadened as to allow a coordinated understanding of the financial system.

Logically, the ECB sounds like the most obvious institution to ensure these responsibilities. However, regardless of the benefits of centralization for the function of LOLR, the reality is otherwise. Already because of its young age, the ECB and the EMU as well, are supported by an external platform, namely the IMF. Although, the IMF's help is valuable in the short term perspective, after a while it may undermine the euro zone's self-governing competence. It was predictable to see a differentiation between a theoretically effective LOLR for the EMU and the actual end product. EMU constraints are numerous and contribute to enlarging the gap linking the theory and the fact. Surprisingly, Brussels came up with a relatively singular project which almost utterly excludes the ECB from the picture. The first LOLR of the EMU is known as the EFSF and whilst being a good initial effort, it unfortunately does not meet the high expectations it was set to reach.

Chapter 3: THE EFSF: DID EUROPE MISS THE BOAT?

Early on, the European Central Bank (ECB) took control of the situation, against its own will and assumed somehow the role of LOLR. Due to the degraded public and/or private finances, Brussels went on to implement the EFSF, a special purpose vehicle acting as official temporary LOLR for the euro zone. Interestingly enough, in many regards this creation defects from the mainstream conceptions apropos LOLR requirements. Even though, the ECB firmly defends its younger sister institution, many reproaches have been raised owing to the narrow approach underlying the EFSF's goal.

The growing discontent towards the EFSF reveals a serious uneasiness if not embarrassment in how the diagnosis of the crisis has been interpreted and treated. Rightly, spurring critics point out relevant concerns and inconsistencies in the structure and agenda of this new institution. Consequently, it seems relevant to study why is the EFSF not merely enough and ill-designed as a LOLR to safeguard the euro zone from future financial downturns. To comprehend appropriately, this analysis will concentrate on the EFSF's institutional design and functions, its mandate by contrast to its scope of action, its internal contradictions as a LOLR and the implications between a temporary and permanent LOLR.

3.1 Institutional Design and Functions of the EFSF

The EFSF came into being after the EU Member States agreed on the second weekend of May 2010 to effectively cope with the untenable financial situation in the euro zone. The need for a legal and official body acting as LOLR turned out to be indispensable following the problematic case of Greece and potential major banking failures in other PIGS[5]. The ECB did not undertake this task since it has judged that it was not part of its mandate of price stability. This

5 PIGS is an acronym used to refer to Portugal, Italy, Greece and Spain in a pejorative way in regards to the mismanagement of their high sovereign debt.

young LOLR is based in Luxembourg and legally registered as a company. Its aim is to provide transitory financial assistance exclusively to euro zone countries in case they threaten the stability of the European Monetary Union (EMU) by requesting financial assistance (EFSF 2010, 4). Ideally this EU body should not intervene much since it purpose is very limited and of ultimate resort.

As any other LOLR, the EFSF is a mechanism intended to confine financial help to states formally requesting its support (Agrawal, 2011). Its objective is not to prevent economic collapse and rather to cure the illness: "[t]he EFSF is not intended to actually resolve solvency problems, but it is buying time for fiscally weak euro area members to recover and eventually improve their fiscal situation" (Ratner 2010). At the macro level, the goal reveals to be the isolation of the risk of contagion within the fragile equilibrium that is the euro zone. It is crucial to note that the EFSF, while being at the forefront of any LOLR lending operation, it simultaneously works hands in hands with other institutions namely the European Financial Stabilization Mechanism (EFSM) and the International Monetary Fund (IMF) (EFSF 2010, 4). Those two institutions may contribute up to 60 and 250 billion euro respectively in LOLR efforts in order to strengthen the relief fund while the EFSF has a leverage of 440 billion euro. In sum, the whole rescue sketch reaches 750 billion euro. Interestingly enough, the involvement of the IMF in rescuing risky euro zone states marks a *volte-face* in the EU's policy of self-management (The Economic Times 2010). Considering that the IMF is currently fully and permanently engaged in the process, perhaps the international body has entered into a new era or simply went back to old customs.

Basically, the EFSF's main function is to issue bonds on the market to raise funds that are immediately transformed into loans assigned for the nation in menace of sovereign default. Once the request has been officially launched, the facility institute series of meetings between Member

States, the ECB, the IMF and the EU Commission with the intention of designing a country programme which would allow the designated problematic state to borrow money at tolerable rates. As a result, within a few weeks, the EFSF issues a plan to get the country back on rails not without severe conditions attached to the favourable interest rates. Depending on which country asks for the EFSF's aid, a discretionary deal adapted to the specific needs of the country will be released just as it was done for Ireland (Guha 2011).

In order to improve a country's borrowing capabilities, the EFSF lends cash that is backed up by the euro zone Member States. Indeed, the 440 billion euro of reserves is all provided and guaranteed by the states using the euro. However from that amount only 250 billion is available for countries in distress (Financial Times 2011). The remaining 190 billion is actually used as a security capital buffer to secure the AAA rating of the EFSF which provides the institution with advantageous interest rates. A peculiarity in the facility's design is its intentional short lifetime span. Indeed, the EFSF should stop its operations in 2013, the estimated time when the risks of financial crush will be deemed completely averted (EFSF 2010). Furthermore, the rushed negotiations (over a single weekend) prevented the EMU to come up at the time with a permanent solution.

3.2 Wrongfully Mandated

The matter of concocting a LOLR for a market economy involving more than 250 million Europeans represents a massive enterprise. Surprisingly, the EU institutions did not come up with a solution prior to the crisis. Consequently, the EFSF was born out of a somehow rushed political process. The result is a small institution with a very narrow scope of power to conduct a titanic command. According to the Bagehot principle, the duty of LOLR is assigned to the central bank which acknowledges and assumes this responsibility (Wood, 2003, 343). The EFSF being a separate entity from the ECB contradicts the standard observed elsewhere. Therefore, it has no saying on EMU monetary policy decisions. It appears a bit counterproductive to allocate intertwined tasks to two different bodies while one could do the job more effectively, in this case the ECB. As a result, the EFSF is almost reduced to take on mechanical operational duties.

At least, the facility's creation was one more step for Europe back at a stable financial situation. The instauration of a LOLR gave confidence to the markets by reducing fears of contagion, guaranteeing deposits, injecting money into the economy and avoiding a sudden disruption of credit. Even before engaging into any procedure, this entity has reassured and realigned the commitments of financially weaker peripheral countries which were the main source of economic anxiety amongst the EMU Member States (Ratner 2010). So, the intention behind the EFSF has been properly fulfilled. However, the way it is constructed includes many shortcomings. Since it is not a central bank itself, the EFSF is stripped of power to prescribe remedies before a national economy/debt/financial situation gets out of hands For instance, the EFSF cannot lower interest rates in order to stimulate the economy. The only time when it has an impact is once a country officially demands its assistance. Then at that point it can infuse fresh money supply into the market.

Again the EFSF shows a major flaw in its logic when it goes onto giving a hand to a state. Being formally recognized as the LOLR of the euro zone it should propose a rescue plan in cases when the country is illiquid (Zingales 2010). Following this, the EFSF fails to make a proper distinction between illiquidity and insolvency. Helping out an insolvent country is like bailing out that country. Doing so opposes the classic definition of a LOLR and also the article 125.1 of the Treaty on the Functioning of the EU (Sibert 2010, 2). Though, such interventions are not theoretically justified nevertheless, there are some national interests to take into account which explains the recourse to a LOLR even for insolvent entities. For instance, it is more than likely that Greece's bailout was highly correlated with protecting the interests of French and German banks (Sibert 2010, 8). Clearly, the political factor has to be considered into the equation. Thus, the EFSF does not enjoy enough broad powers bearing in mind how crucial its impact is. Indeed, the facility is under the control of the Member States rather than being fully independent.

3.3 Internal Limits

Whether or not bailing out a country is the proper action to accomplish, the EFSF seems to be equipped poorly in order to achieve this task properly. Its fund is composed of 440 billion euro all originating from EMU states committed to supply proportionally according to their share in the ECB's capital. The sum gives the impression to be adequate, still: "its lending capacity is only about €255bn because of creditworthiness constraints" (Financial Times 2011). Therefore, the fund and the lending capacity are two completely different things here. The EFSF's instrument to fight against financial distress is through loans i.e. the lending capacity which is substantially lesser than what participating countries have put forward. Hence, the reserves held by the EFSF to be reinvested in safe assets should not be considered as being part of the lending capacity. Actually, the EFSF resembles more to a weak institution that embodies a classic Collateralized Debt Obligation (CDO) rather than a LOLR.

In light of the reduced EFSF capacity, one wonders if the institution in case of several synchronized national defaults or one major economy requesting its aid would be able to answer the call. With the very recent bail out of Portugal, Spain creates concerns regarding the EFSF's ability to deliver a sufficient 'treatment'. The Iberian nations have very intertwined economies making them vulnerable to the weaknesses of their neighbour on the peninsula. Furthermore, whenever a nation goes under the umbrella of the EFSF it withdraws its financial support to the facility rendering the fund even shakier. If Spain falls under the protection of the EFSF, the institution might have a hard time to fulfill its main directive with the current monetary provision (Alloway 2011b). Luckily this lack of funding has been acknowledged by the EMU instances and negotiations are under way in order to increase the funding to the EFSF. The capital is limited owing to the fact that the money comes from the Member States; it is not fresh money created out of thin air.

Yet, rising the funding is one way of doing things; it reveals to be the hard way. The easy way would be to improve the facility's leverage of capital. This would not even require an additional euro from the Member States. To do so, it must be agreed that the EFSF's triple-A rating has to be dropped. By lowering the rating, the leverage of the EFSF grows significantly: "[with] a AA rating, its lending capacity can be instantly increased from about the current levels of €250-270 billion to more than €400 billion without any increase of commitments on behalf of Member States" (Alloway 2011a). This increase can immediately hamper the doubts raised as regards to numerous states demanding the intervention of the LOLR. Besides, the downgrade from triple-A to double-A on the credit agencies' scale is almost insignificant in terms of fluctuation of interest rates. Anyhow borrowing countries do not even enjoy the low rate gained from a triple-A rating since the EFSF automatically sets higher ones in the conditional package addressed to the troublesome state. Subsequently, the true beneficiary of the AAA rating seems to be the EFSF, not the state in financial disarray. This is highly inconsistent with the goal that must be brought to completion.

Given that providing funds remains the key role of the EFSF there seems to be no rationale in keeping the highest score from credit agencies. In the end, the facility exclusively gets its financial support from countries not banking institutions or private investors. Thus, the only *raison d'être* to maintain a high rating is to attract buyers once the EFSF issues bonds on the market in order to collect required funds. However, even with a double-A rating, investors will seize the occasion considering that the EFSF releases bonds in times of crisis, so while the market is usually down and in need for good ratings. Ultimately, the EFSF needs to focus on rescuing countries in difficulty before considering making a profit out of this venture. An institution engaged in LOLR activities such as the EFSF should concentrate on re-establishing the financial soundness of the country in need and seek for itself a balanced budget and no more. In academic circles, it is believed that this 'unreasonable' attachment to a triple-A rating is a simple case of reputation (Alloway 2011a; Re-Define 2011). This is not denied by Mr. Jonathan Yiangou, Economist at the ECB, and two reasons are actually put forward to defend the triple-A rating of the EFSF:

> First, it is important as a symbol of credibility, you get the right type of investors; big institutions and firms, serious real money invested for the long term. […] Second, the EFSF is almost by definition designed to go to the market at a time when it is likely to be in financial disturbance […] One can never say exactly what the spread is going to be between double-A and triple-A in those circumstances. So, the idea is to be certain whatever the conditions, you can get the best possible rate and therefore pass through that to the borrowing country rather than take a risk that you might actually go to the market at a time when there is no appetite for double-A investments (Interview at ECB 2011).

Indeed, Mr. Yiangou justly points out the inevitability of making sure that the EFSF will attract investors for the sake of effective last resort lending operations. The divergence of opinion stems from the different aim in the LOLR action. Scholars see this AAA rating as an unnecessary additional burden imposed on the state in disarray, while policymakers seek to guarantee the funding of the operation. Perhaps, not much may rightfully explain this exigency in line with the underlying principle that should govern the facility, namely a spirit of solidarity. Anyway in the end, owing to the correlated indebtedness of the euro zone and the few countries with AAA ratings from Fitch, Standard & Poor's and Moody's it is improbable to see the EFSF preserve its current rating (Sibert 2010, 3). If it does maintain this rating, it will require supplementary financial engagements from the lending governments in order to guarantee the highest possible score. It seems that adjustments, one way of another, will have to come quick in the present economic uncertainty.

3.4 Temporary or Permanent LOLR

For some obscure reason, the EFSF has been implemented solely to cover a transitory period (from the crisis to the first half of 2013). The permanent solution is the European Stability Mechanism (ESM). Little is known about the ESM apart from the fact that it will be a rescue fund of 500 billion euro (Weisenthal 2010). For the rest it will present great similarities to the already existing EFSF. Since the bailout of Greece, Ireland and now Portugal changes are imminent in the very institutional structure of the facility and analogous adjustments to the ESM are predictable. More worrying is the absence of the connotation 'LOLR' attached to the giant rescue fund in the making.

Why not extend indefinitely the existence of the EFSF? The institution operates in the worst possible environment; a severe post-financial crisis. As a consequence, this harsh setting helps to shape the EFSF in the best possible model to face future downturns (enlargement of its lending capacity for instance). Unless the ESM becomes a copy paste of the EFSF much work will have to be done once again, but then to replicate the facility is also irrelevant since the EFSF is already implemented and in work. Even more mind-boggling is that prior to the EFSF creation, another EU institution very well trusted could have taken the LOLR task: the ECB. It is true that the ECB was not too keen about taking matters into its own hands to bailout Greece hence the reason for the EFSF. Eventually, the temporary LOLR was constructed while having the ECB in mind since both institutions share structural similarities in terms of decision-making; a German as Chief Executive Officer and a French as Deputy CEO (Agrawal 2011). Moreover, the ECB supervises in many regards the operations undertaken by the EFSF such as bond purchase through the 'securities market program'. The subjugation of the central bank over the LOLR is also evident since it retains an observer on the facility's board and guarantees to purchase the EFSF's bonds in case of default (EFSF 2010). The duplication of institutions reveals to be inefficient and wasteful for the reason that a LOLR needs to be processed in a centralized matter. In other words, detaching the assignment of LOLR from the ECB creates more ambiguity than a clear pledge to solve the issue.

The problem of moral hazard is also a concern not well addressed by the EFSF. The lack of distinction between insolvency and illiquidity highly increases the likelihood of a country going into default since there seems not to be a situation when a country's request would be rejected. Being a short-term LOLR does not reduce the moral hazard bearing in mind the failure to make the aforementioned distinction of financial default. Additionally, the creation of the ESM may be regarded as a continuation of LOLR and thus perpetuate the complication created by the moral hazard. However, taking into consideration the intensity and quickness with which the financial meltdown stroke the euro zone, having a LOLR is undoubtedly the right legislative move to make. The constituency of a LOLR must be acknowledged and meanwhile the recourse to its service has to be restricted and highly conditional (including penalties but not monetary in the short run). Therefore, a permanent LOLR is the most viable outcome as long as it does not become an open house.

3.5 The Impact of the EFSF

Finally, the implementation of the EFSF to solve the financial crisis is no solution for future financial crises. The institution shows on several aspects that are ill-designed and not merely enough to handle the task it was set up to fulfill. Indeed, the essence of its mandate is crucial for the financial health of the euro zone. In the meantime, its powers are circumscribed and limited to operate as a simple large scale CDO. Its configuration is strewn with inconsistencies that are hampering the legitimacy and effectiveness of the financial organization. In reality, the facility is rather weak; it maintains a AAA rating despite the fact that the lending capacity is barely above half the total funding it receives.

Although the EFSF did succeed on its first call (from Ireland) and will most likely accurately deal with Portugal's case, it does not guarantee that future takeover(s) will be going well. What would happen if, hypothetically for Spain, the EFSF's internal negotiations for a loan (between finance ministers of the euro zone) do not come to an agreement? How disastrous a deadlock could be? How will the EFSF or its descendant post-2013, the ESM, cope with an insolvent nation?

Chapter 4: IMF IMITATION

While the EFSF represents the solution brought up by EU legislators, other propositions have been displayed by scholars and experts in the field. Whereas the response of the EMU has been one of transitory measures; the most accepted alternative coming from the literature is the creation of a lasting EU body; a hypothetical EMF. So, following the somehow improvised bailout of Greece by the ECB, many proposals have sought to ameliorate the institutional proceedings set forward by the EFSF. Still, the idea behind the EMF holds basic flaws that would not make it more appropriate than the current state of affairs.

Consequently, perfecting the EMU's reaction to the financial crisis became increasingly more a mainstream topic for scholars such as Daniel Gros, Barry Eichengreen, Nouriel Roubini and John N. Cochrane. However, there is no general consensus in the scholarly community on the issue. Yet, it seems that the EMF's imperfections outweighs its benefits, subsequently the aim is to demonstrate why and how the EMF is wrongfully thought through and what is inconsistent with sovereign default. At first glance sovereign default and also an EMF sounds attractive and innovative, though the results obtained are far from being optimal since they create systemic predicaments.

4.1 EMF Project

The EMF would represent a more complex and solid institution than the current EFSF. As of now, the EFSF is a simple (although massive) vehicle of European bonds whilst the theoretical EMF would encompass a more compound set of support mechanism aimed as last resort for the periphery of the euro (Firoozye 2010, 7). Basically, this European creation would broadly resemble the IMF up to the point that its jurisdiction would be limited to the euro zone. The aim in itself is worthy: "to restore market discipline by making failure possible" (Gros & Mayer

2011b, 2). Although, the real impact gained from the introduction of an EMF is highly unlikely to alleviate the breaches found in the financial distress issue. First, supervision will not be enhanced. Gros & Mayer claim that: “[c]loser surveillance [...] should lead to sounder fiscal policies”(Gros & Mayer 2011a). In fact, this scheme would expand the risks of moral hazard. Giving EMU countries a second international organization to turn to in case of reckless finance just encourages irresponsibility. “The possibility and increased expectations of bailouts by a new EMF would promote more, not less, fiscal profligacy by the Greeces of the world” (Gokhale 2010). Furthermore, avoiding the IMF's involvement on an “all-European” basis is missing the point; a nation will still feel as if a foreign power is intruding in its domestic affairs. A country will not necessarily be drawn towards a European institution, perhaps towards the institution offering the best bargaining.

Second, proponents of the EMF suggest that under it sovereign default would be facilitated. Simultaneously: “[t]he new institution would provide a framework for sovereign bankruptcy comparable to the Chapter 11 procedure for bankrupt companies in America” (Gros & Mayer 2011a). It is true that the unlikelihood of EMU states going bankrupt needs to be reviewed. However, the means to achieve this reform is sub-optimal when placed under the EMF. Establishing a whole new institution is time consuming, imposes a burden on legislators and requires a very complex set of rules that must be compatible with other EU institutions such as the ECB. Indeed, exposure to misunderstandings with the ECB remains a threat to the well-functioning of the two since they work on conflicting levels; lender-of-last-resort, bailouts, foreign supervision and authority. As Tyler Cowen points out : “the underlying problems of European multilateral governance are unlikely to be solved by creating an entirely new and different institution [...] rather the ECB were reformed by broadening its focus beyond price stability" (The Economist 2010). Even the hypothetical funding will be tainted by *ex ante* well-anchored multilateral suppo sitions.

Third, the very creation of an EMF calls for improbable because of unequal negotiations. Participants are aware in advance of the role they will play. Contributions will be based on the country's weight in the Union (similar structure as in other EU institutions) but the spirit of the enterprise on paper will not materialize in practice. Usually, providing proportionally identical shares reflects the spirit of equality inherent to the EU. However, the EMF would not be working equally across all Member States. Indeed, from the beginning: "conditions are hardly ideal for the negotiations surrounding an EMF-type institution - winners and losers are too clearly known" (The Economist 2010). In the end, enforcement will not be credible. Adding a new institutional body will not vouch for more transparency as it dilutes the accountability procedure. The EMF disregards the role of politics in the issue, thus underestimating its representation since it is mostly a normative concern.

4.2 Access to Sovereign Default

One very peculiar aspect of the bailouts of Greece and Ireland is the allergic reaction of EU institutions to allow countries go bankrupt. Indeed, fears of contagion and unstable currency drove the ECB to act as to absolutely prevent any default from a national entity. Some argue that sovereign default should have happened during the financial crisis, others agree with the ECB's decision. Conceivably, the optimal solution is somewhere in between.

Economically speaking, default is desirable, however that holds for companies, countries are in another category. Competition is not encouraged amongst Member States and furthermore, because of: "the principle of solidarity [...] they [EU members] can expect to receive support when faced with extraordinary financing difficulties" (Gros & Mayer 2010b, 2). Promoting sovereign default would contradict key goals of the EU integration process. Moreover, the emphasis of a financial crisis response cannot focus on a sub-optimal outcome. Even though, each country possesses its own complex national setting there is a common trend to which a set of regulation must answer. A country only really risks to go broke once the: "financial crisis [has risen] sovereign risk, especially in advanced economies that run massive budget deficits and accumulate large stocks of public debt as they socialize private financial losses in order to revive economic growth" (Roubini 2010). The puzzle cannot be depoliticized; the political dimension requires an involvement from the state that goes beyond a simple chapter of law codifying national bankruptcy. The reason behind hazardous financing is known and must be tackled by constructive reforms aiming at the source not the symptoms.

Politics must be part of the solution to sovereign default in order to avoid contagion all across the interdependent nations of Europe. Some scholars such as John N. Cochrane do not believe in the risk of contagion: "Any contagion [...] is entirely self-inflicted" (Cochrane 2010). Even though, it is true that some countries have increased the burden and risk of bankruptcy by themselves such as Spain with its housing bubble, the reality appears to be a much more elaborated portray. Contagion is real, especially with the devastating effect of speculation. Therefore, facilitating default bears so much negative consequences when it is applied to a country that the ECB did the right thing by backing up the nations suffering from a liquidity shortage. The next step is even more crucial; the rules must change in times of crisis. The worst aspect of the current crisis is reflected in the illogical share of ordeal amongst economical actors. Reforms have to make a clear distinction between the different types of debt since in this crisis a problematic transfer arises: "private debts often become public ones" (The Economist 2010). Clearly, states become losers and private investors are winners. At some point, those who are responsible for the crisis need to pay the price. Accordingly, private shareholders should lose according to their bad investments. The risk of sovereign default is intricate to the EMU, however its shadow can be considerably reduced through better standards of fiscal transparency. These standards can be implemented by a strong commitment to enhanced cooperation between the EMU members.

4.3 Reforms Leading to Fiscal Transparency

While admitting that sovereign default should be permitted at least in theory, more has to be done to restrain countries following the slippery slope of bad financing. Letting a country go bankrupt is not enough: "[w]e should by now have learned that policy should not only be geared towards preventing failure, but preparing for it" (Gros & Mayer 2010b, 5). Despite having countries barely financially sound at the moment, the time is appropriate to establish regulation reinforcing the transparency of financial transactions. Advocating for an EMF would do nothing to change the status quo existing prior to the crisis. This institution could only play an active role on nations requesting its help, thus already in a precarious situation. On the other hand, the ECB and other supranational EU bodies can impose strong conditionality on the financial package offered to fellow NBCs in despair. Part of that money needs to be used to cushion the sacrifices demanded by harsh reforms: "[f]iscal adjustment and structural reform without financing is more fragile and liable to fail without a war chest of liquidity to prevent a run on public debt while the appropriate policies are implemented and gradually gain credibility" (Roubini 2010). Undoubtedly, reforms need financing; however the implementation of fiscal discipline remains priceless in the long run. Ideally, changes would not require an additional institution such as the hypothetical EMF. The ECB should extend its scope of responsibilities and encompass financial stability. This objective should be as imperative as price stability.

The project is quite ambitious, although the current impasse demands equally big measures. The path to national fiscal transparency relies on a more proactive role of the ECB and particularly stronger EU legislation enhancing fiscal integration. The core of this integration reveals to be stricter controls upon the mechanisms of debt-control (Eichengreen 2010, 23). The focus is wrongfully targeting deficits, while uncontrollable rising debts are the hidden cancer of EU finances particularly in the PIGS economies. The origin of these expanding debts is complex, but it is roughly the result of a: "twin problem of public-debt sustainability and external-debt sustainability" (Roubini 2010). Meanwhile, the ECB must request financial regulation pinpointing at growth and consolidation (more new jobs). The path to growth is a complicated one; however it can be achieved through simple changes. For instance, wage increases should be positively related to productivity increases. In the case of nonconformist states, the EU should have a clear guideline of sanctions imposed in a coercive way. The EU has to use the enhanced cooperation procedure to guarantee equal involvement and responsibilities amongst parties. Otherwise, the last step before the redoubtable sovereign default would be the involvement of the IMF. Still, the EU enjoys enough power and authority to decrease significantly this remedy. "For states with excessive deficits, the temporary withdrawal of voting privileges would be a better disciplinary instrument than monetary fines" (Eichengreen 2010, 23). Likewise, the no-bailout EU provision has to be abolished, even though in practice this clause is already outdated. The EU needs more astringent and uncompromising fiscal regulation with a purposeful ECB keen on financial stability.

4.4 EMF: Out of the Question

In conclusion, the euro zone went through its first real financial crisis in 2008-09. The aftermath is still not precisely defined; however the measures currently implemented hold a high degree of relevance for the future health of the financial system of the EU. Even if the EMU survived inelegantly the financial distress, the catastrophe was barely avoided. Experts and legislators understand that the time is at improving and rectifying the recovery system of the euro zone thus, several propositions have surfaced.

Concerning the EMF, this option does not make much sense since it would greatly aggravate the already complex financial rehabilitation process. Its creation would inevitably be biased by the Member States. More importantly, everything that would fall under the jurisdiction of the EMF can easily be distributed to existent EU institutions. In the end its introduction would simply be an unnecessary legislative puzzle. The other suggestion on introducing a clear access to sovereign default holds some truth, but must be nuanced and limited. Such recourse has to be circumscribed exclusively to a last resort measure, including an unsuccessful rescue from a European LOLR. Otherwise, one severe bankruptcy may trigger a chain reaction harmful to the entire euro zone. So, more extensive regulation has to be initiated.

Regulation working on more fiscal transparency is the soundest solution since it attacks the problem in its core. Focusing on debt-control and further integration between the member-states, the ECB and the EU legislative bodies retain promising outcomes. Member States will have to realize and admit that the answer lies in giving up legislative competences. “Stricter controls could of course infringe on national sovereignty and this may be necessary for further integration” (Eichengreen 2010, 23). Is Europe ready to push the project even one step further? Likely not when taking into account the strong national feelings, consequently difficult bargaining is predictable. The good news is that finance is intertwined with the economy and in this aspect Europe is the champion at integrating, standardizing and harmonizing.

Chapter 5: THE ECB's PLACE IN ALL THIS MESS

The whole ongoing debate concerning the responsibility of LOLR in the EMU has been spiced up by controversial propositions such as the EMF and even more by the actual solution, namely the EFSF. It seems like the ECB does not have a key role owing to the decision of the Member States to replace the EFSF, once its mandate is over, by the ESM.

5.1 The ESM

This forthcoming institution resembles the EFSF in many features, although it does rectify flaws found in the previous LOLR. The good news is that this facility will be permanent, thus strengthening the EMU's *ex ante* acknowledgement of a LOLR. In addition, its status will be far more institutionalized than its predecessor since: "[t]he ESM will be established by a treaty among the euro-area Member States as an intergovernmental organisation under public international law" (European Council 2011, 22). Also, it will decrease the risk of having a deadlock throughout the decision-making because the resolutions are taken by a qualified majority of 80% of the votes (European Council 2011, 23). Even more interesting is the inclusion of a tool making a fundamental differentiation allowing the LOLR to come up with a more effective plan to rescue a country in financial disorder. As Mr. Glöckler presents it:

> The future ESM will have a debt sustainability analysis upfront and then it will be determined whether, like the IMF does, this is an issue of illiquidity and then we basically help out the program to the country out of the market and gradually bring it to an adjustment process to bring it back to the market or whether this is something more fundamental and then the ESM treaty will talk about private sector involvement (Interview ECB 2011).

So, the ESM will undertake more tasks than the current EFSF since the debt sustainability analysis remains at the moment in the hands of the IMF.

However, fundamental deficiencies remain and impede on the euro zone's capacity to deliver an appropriate LOLR. While acting at the European level, the ESM still stands as a mechanism controlled by the Member States (Kapoor 2011). They are the exclusive providers for its fund and hereby in charge of how it will be spent. Even more aggravating is the double standard for the ESM's capital provisions: "[c]ountries with easy access to capital can provide cheap guarantees, while the weaker countries must put forward cash" (Münchau 2011). What is more, the institution has been thought of under a narrow conception of the tasks and duties of a LOLR. The nature of the last financial crisis has clearly shown the need for a drastic change. Most of the policymakers have not seized the gravity of the situation. The ESM will most likely heal the wounds rather than prevent the symptoms to appear. Europe has a unique opportunity to act, with its continental platform; the euro zone, in order to reverse the tendency.

5.2 The ECB's Credibility and Legitimacy

As a starting point, the ECB is undoubtedly the best institution to carry out changes in the EMU economic arena. At the outburst of the crisis, the EU was almost passive while national governments took the front of the stage. However, the ECB without delay engaged in safeguarding the monetary union. "The European Central Bank's decision to accept even junk-rated Greek bonds finally removes the threat of a funding crisis among Greece's banks and reinforces the ECB's role as crisis-time lender of last resort" (Reuters 2010). The independence and supranational qualities of the Frankfurt-based institution allowed it to perform quickly and provide tangible changes. "The ECB was able to act with speed, could marshal enormous resources and had the advantage of a flexible legal and operating framework so it could respond constructively to the evolving crisis" (Kapoor 2011). Its leadership gave back legitimacy to the EU institutions in their role of preserving the *acquis communautaire*.

In comparison with other EU institutions, the ECB grasped in time the harshness of the situation. Exceptional measures needed to be taken and the bank took the lead in that matter: it understood that some institutions were not allowed to default (too-big-to-fail concept) since it would have been harmful to the euro. Thus, the ECB consciously took over toxic assets that forced it to boost its capital reserves for the first time in its existence (Ehnts 2010). All along the financial ordeal, the ECB stood strong and gained credibility in crisis management. “[T]he ECB's actions during the recent period of financial market challenges were reasonable and did not interfere with the primary objective of price stability. Therefore, the ECB's credibility is not at threat” (Norbert & Bergheim 2008, 5).

The good performance of the ECB needs to be taken into consideration for the build up of a European LOLR. The transposition of that responsibility from the euro zone NBCs to the ECB is a logical course of actions as to assure a well-organized enterprise of financial rescue. It would ultimately give better results than the EFSF or the ESM as it would be a central supranational entity engaged in price and financial stability allowing both to be properly coordinated. The danger is to blindly trust the ECB and impose on it a new directive (ensure financial stability) that is, at the moment, barely quantifiable. The accountability and credibility of the institution would be endangered as Mr. Yiangou puts it:

> That credibility has come from having a very specific target that is measurable to which the ECB delivered on it. The more diffuse these things become, the harder it is to actually justify your position, the instruments you are using, why you were there or not there and for the public to really measure if you are performing in the way they expect you to. If you start to introduce that degree of uncertainty that affects everything […] It becomes harder to actually establish legitimacy (Interview at ECB 2011).

Answering widespread systemic risk across the EMU necessitates a centralized operation and the ECB can be mostly effective at this at the same time as restoring confidence into the market

(Aglietta 1999, 30). At least fortunately, timid steps have been taken into that direction. Slowly but surely, the ECB is officially engaged in overseeing financial stability through the European Systemic Risk Board (ESRB). Briefly, the ESRB is: “a body designed to take a bird’s eye view of Europe’s financial system and flag up emerging problems so the relevant authorities can act” (Carrel et al. 2011). The effort is noble, nonetheless more has to be done for a synchronized operation of supervision at the European level. Indeed, the promotion of European financial stability has to be controlled through macro-prudential systems because of the interconnectedness of European markets (Obstfeld 2009, 14). Consequently, there is a real obligation for Member States to exhibit more political willingness in ceding power to European supranational bodies.

5.3 Circumventing the Member State Impasse

On one side, the ECB should take on more responsibilities related to supervising global stability as long as the EMU Member States provide the proper tools. As of now, some instruments are already available to facilitate the convergence of action between parties with similar goals. For instance, EMU countries can engage in Memoranda of Understanding (MoU) which are indicators of commitment between states to attain a common line of conduct. By encouraging cooperation, EMU states would eventually have a pan-European MoU that could then be easily legally enforced by supranational entities. The Nordic states have previously agreed to act together to peform the role of LOLR towards a multinational firm working in no less than two countries (Vollmer 2009, 65). There are more existing MoU, though they encompass less crisis management measures. In the end, the real challenge is to transform those non-binding agreements into the law. It represents a good self-starter as: “[t]he MoU aims in particular at providing initial conditions for policy coordination between all these [national] authorities” (Schinasi & Teixeira 2006, 10).

Another avenue to think about is the Lamfalussy process. Roughly, it consists of a pro-integration procedure in the European financial service sector. The aim is to plainly expose the blueprint and agenda of the regulation from A to Z in order to smooth the progress of implementation. The Lamfalussy process takes place in four steps; the EP and the Council adopt the legislation, after a review by specific committees Member States representatives vote on the changes, then national regulators coordinate the fulfillment and finally the new rules become enforceable (Alford 2005, 399). The advantage with of *modus operandi* resides in its familiarity with financial regulation. It bridges judiciously the mismatch between the politics and the economics of the EMU. Sadly, the Lamfalussy process was barely disclosed as a viable alternative by the Economic and Financial Committee (EFC) for broader integration in finance including the banking industry (Berger & Hefeker 2007, 375). Admittedly, this course of action appears to be a proper legislative follow up to MoU. Once the political course would be at its final stage, the ECB could effectively accomplish the role of LOLR in an environment proper for it. In other words, the mechanisms to allow the ECB to fulfill sharply a mandate of financial stability are already existent within the EU framework.

CONCLUSION

In conclusion, an extensive literature review about the role of LOLR in light of the recent financial crisis provides one absolute certainty; there is clearly no consensus whatsoever on the topic of LOLR, even less when it comes to implementing one for the euro zone. Nonetheless, the 2008-09 meltdown in the GFS has given indications and hints on the appropriate scheme to develop and implement. The right approach is to analyze step-by-step the attributes required versus the practical restrictions imposed by the politico-economic background.

First, in regards of the theoretical hypotheses with respect to the current state of affairs, it seems that a certain type of LOLR would be better adapted to the euro zone. Hence, the Bagehot principle still stands as a valuable premise, especially since the private sector displayed an excessively greedy and risky mind-set, notwithstanding the moral hazard that comes along with it. A LOLR is fundamental for the safety of the economy and it should be achieved by the ECB. Doing so enables the LOLR to be centralized, acknowledged as a LOLR *ex ante* while cultivating a constructive ambiguity. This ambiguity would uphold only for technicalities, i.e. the LOLR concedes the existence of a penalty rate without quantifying it and disclosing the conditionality. However, puzzles still exist such as the illiquid-insolvent dilemma and the too-big-to-fail enigma. These problems can only be undertaken with imperfect means, namely macro-prudential surveillance or bank effort enhancement measures.

Second, the creature that is the EMU imposes restrictions impeding the establishment of an efficient LOLR. During the crisis, governments, to avoid a widespread collapse of the European financial system, bailed out illiquid and/or insolvent banking institutions. This led to the conversion of private toxic liabilities into public debts. This alteration compels the definition of LOLR to be thought over seeing that sovereign default has become a reality directly caused by private institutions. Not to mention that the complicated design of pan-European banking groups has modified the rules of the game in that the national level of intervention becomes irrelevant. The preponderance of politics and the half-grown structure that is the euro zone also obstruct the implementation of a LOLR as it is desired on theoretical grounds. Indeed, in factual terms, the independence of the LOLR is deceived by interests of national governments. Moreover, overseas involvement by the IMF decentralizes the powers of the EMU's LOLR. Even though a first LOLR would unlikely solve all litigious issues, it would have to incorporate to some extent a mechanism to oversee financial stability.

Third, EU Member States through short term negotiations have agreed to establish the EFSF as a LOLR for the euro zone. It will be followed in 2013 by the ESM which will more or less be analogous to the EFSF although it will be a permanent facility. Nonetheless, both are suboptimal responses to the need for a LOLR since they remain under the control of the Member States. These LOLRs are not centralized enough and clearly not independent enough. Furthermore, there is merely a mention of financial stability in the institutions' setup and no clear indication on the handling of constructive ambiguity. Even the idea of an EMF lacks structural rigour: making a replica of the IMF is obviously counterproductive. Owing to the interdependence of nations amongst the euro zone permitting sovereign default could cause harm to the country in question but also have a contagious effect which in return does not solve the financial disarray.

Fourth, perhaps the current line of thought might be missing the point. They are all propositions avoiding a higher degree of integration. Naturally, the ECB should execute the mandate of LOLR, as after all it is the CB of the EMU. The institution is fully centralized and if accurately proclaimed as LOLR, it will satisfy the need for *ex ante* acknowledgement. Likewise, constructive ambiguity could be successfully applied since the ECB would benefit from the best information on the market for price and financial stability. That is by all means if it is granted supervisory powers to assess the quality of the financial stability in the Eurosystem. As a matter of fact, the present circumstances in place in the euro zone command the introduction of financial stability in the mandate of the LOLR. Otherwise, a LOLR acting in a multinational environment with profound intertwined connections cannot work effectively.

Finally, it is possible to give an answer to the overarching question of this paper, namely what would be a permanent viable solution to the issue of LOLR in the euro zone. In light of the knowledge gathered so far and considering the current conditions at work in the EMU, the ECB appears to be the best candidate for the job. At first glance, it seems unlikely to happen which is true to some extent, however the way things are right now could make the shift possible. The key word is integration: national authorities should enable a smooth transition of powers to supranational bodies particularly in the field of last resort lending. The financial crisis laid bare the structural flaws inside the EMU. Now that military collaboration is happening between France and the United Kingdom, conceivably extended cooperation of the EMU in the economy is not so far away, especially when financial threats strike slyly and announced.

The issue of LOLR in the EMU has been revived by the financial crisis of 2008-09. On account of the ongoing developments on the subject, further researches must be conducted to accurately circumscribe the options available for policymakers. Incidentally, the relation of the ECB with the existing LOLR (EFSF) or its successor (ESM) should be deepened as to analyze the level of independence. Also, it would be relevant to evaluate the impact on the ECB's accountability to assume the role of LOLR. More importantly, it is essential to analyze how financial stability will be dealt with since this notion will come up even more frequently in the news, policymaking and as a topic under study.

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