

Edoardo Beretta (Switzerland)

## The mirage of stability in banking disorder: on forgotten economic principles in the Euro area

### Abstract

The current economic and financial crisis (2008-2012), which continues to hit the headlines and to place the stability of the global monetary system in jeopardy, has furnished the economic theory with several new elements of knowledge. Undoubtedly, the European Monetary Union (EMU) and the sustainability of its exchange-rate regime are particularly in danger. In fact, it appears that in crisis periods its super-fix regime suffers a greater loss of confidence than its direct competitors. These findings combined with the still neglected causes of financial turmoil represent a lethal mix in the Euro Area case. According to our analysis, there should be a distinction between fundamental concepts like liquidity, money and savings, which nowadays misses and systematically leads to over-grant credits. Inflation as well as financial turbulences are the most evident consequences of the current non-system. In addition, the crumbling pyramidal structure of banking systems has contributed to the destabilization of the world economy as a whole. Detrimentally enough, the Euro area does not have sufficient policy instruments to effectively fend off monetary speculation. Of course, communitarian institutions have adopted counter-cyclical measures and established supervision authorities in order to minimize dangers from prolonged financial turbulences. Nonetheless, these interventions do not eradicate the structural weak points of the European financial system, which continues to be triggered by the heaviness of unprecedented destabilizing powers.

**Keywords:** financial systems, liquidity, money, monetary unions, savings.

**JEL Classification:** F40, F34, G15.

### Introduction

The Great Recession, which hangs over the destiny of the world economy and the global financial system like a Damocles' Sword (Beretta, 2012b), has highlighted several factors of structural weakness. For example, the United States of America have experienced (because of their remoteness in time, forgotten) episodes of panic waves across the financial, banking (cf. Lehman Brothers) or insurance (cf. AIG) sector. On the other side of the Ocean, the wide spreading sovereign debt crisis combined with winds of contagion-like recession among the 17 member countries of the European Monetary Union (EMU) is still seriously endangering the European recovery. In this specific regard, EMU's ongoing debt problems have added some new elements of discovery to the super-fix exchange-rate regime called "monetary union", namely for instance that sustainability in public balance sheets matters (even) more than in monetary sovereign countries (Japan, the UK and the US). Why is this assertion especially true for the Eurozone? Undoubtedly, because of the missing degree of autonomy in monetary policies, persistent divergences in fundamental economic variables like growth, inflation/unemployment rates or GDP per capita and inhomogeneous economic pasts (and achievements) before monetary unification occurred. As empirical evidence proves, monetary integration has not provided adhering countries with any adequate or, at least, diversified margins of action. In fact, the European Central Bank (ECB) regularly sets common interest rates and monetary powers have been "ex-

ternalized" to the benefit of communitarian authorities. This leads in turn to a drastic use of fiscal policies (for instance, through generalized increases in VAT standard rates (European Commission, 2012b), which aim at replacing the lack of monetary autonomy and offsetting limited budgetary measures left. In fact, the new European Fiscal Compact signed on December 9, 2011 no longer allows States to contract debts exceeding 0.5 per cent, which means a drastic reduction as compared to the previous constraint of 3 per cent in terms of annual GDP (cf. Maastricht or "convergence criteria"). Otherwise stated, either the economy goes well and the State is able to collect enough taxes to keep its balance sheets in order (cf. Germany and Finland) or, if the real sector is in a recessionary state, States cannot anymore raise enough resource inflows to fulfill their financial needs. Therefore, instead of increasing tax revenues during economic growth periods and replacing lower fiscal inflows during slowdown phases by issuing debt securities, the new communitarian agreements tend to exacerbate pressures weighing on the real economy, which is negatively affected by these measures.

Furthermore, sustained imbalances among member countries dampen the effectiveness of any common policy strategy. The "one-size-fits-all" solution envisaged by European authorities by setting (debatable) convergence criteria seems not only to be rather unsuccessful, but it also triggers the economic sustainability of the communitarian project as a whole. This prejudicial situation is all the more detrimental in the light of discordant economic pasts experienced by EMU member countries. Hence, the credibility of the agreement is affected by an "original sin", which

goes back to each country's monetary achievements. In good times (2002-2008), speculators and investors seemed not to be cognizant of it, but, in bad times (2008-2012), already subsistent disequilibria progressively attracted the attention of rating agencies and anxious savers. A proof of this phenomenon can be found in intra-European imbalances in 10-years public bond yields of countries like Greece, Italy and Spain as compared to German *Bundesanleihen* (Table 1, see Appendix). Symptomatically enough, such heavy discrepancies show that, since exchange rates are implausibly blocked at a "one-to-one level" (1 Greek Euro = 1 German Euro = 1 French Euro = ...) despite increasingly diverging economic performances, spreads on bond yields have become the only way to highlight differences in real terms among EMU country groups. In addition, the Euro (as conceived today) tends to dampen the competitive potential of underperforming member countries, because the value of the European single currency does not reflect their economic performance (Beretta, forthcoming). Since nominal exchange rates are artificially the same both for more prosperous as poorer European countries, the latter aren't anymore able to compete with wealthier nations, which in turn means that their imports of goods/services are likely to increase more steadily than exports: this *status quo* is therefore particularly likely to lead to current account deficits and growing external indebtedness in the public as well as private sector. Today's crisis also proves that, during economic turmoil, common currencies suffer a greater loss of confidence than national money units, because the first are (theoretically and practically) reversible to national currencies, while the latter can be of course devaluated, but this is the end of the story! And speculators as well as pessimistic savers are well conscious of these structural characteristics and the vulnerability deriving from them. In the light of this, sudden capital flights or bank runs are literally bound to occur. As some commentators have pointed out, "[b]asically", once the market knows how a Euro Area exit would work, the market would then start to immediately bet against all the other countries that are at risk of leaving. This would not only concern the financial sector; all other businesses as well as households would stop entering into contractual relations with the countries in question (resulting in, e.g., no delivery of goods against trade credit). From this moment onward, the euro would stop being the euro, as the euro in Lisbon would not be the same as the euro in Frankfurt or Paris" (Wolff, 2012). The preamble demonstrates the relevance for EMU members that their public balance sheets are in an ordered state well before their adhesion to the Eurozone, if we admit that monetary unification has

resulted in a pronounced tendency to the accumulation of public obligations. In both cases, counter-cyclical instruments at the disposal of monetarily unified countries are very little as compared to monetary sovereign countries (cf. the United States of America). In this specific regard, high public debt levels can be either the main cause of financial crises due to lack of confidence or the result of prolonged bank bailouts. If public balance sheets are not in a well state of being before countries become EMU members, this state of affairs will soon mutate into a source of incalculable turbulences on financial markets in times of economic crisis. Thus, investors are well cognizant that Governments, which are willing to rescue systemic components of their home banking systems, have fewer resources than in the past, because they have delegated their monetary powers to communitarian governance bodies. In addition, Keynesian deficit spending measures, which are likely to be inflationary, but may temporarily revert deflationary trends, have been almost completely removed from the weapons stockpile at the Governments' disposal.

In addition, States with unbalanced balance sheets will not be able to adopt extensive anti-cyclical policy measures to the benefit of the real sector without increasing their debt level, exposing themselves even more to speculation forces and deteriorating the state of the public as well as of the private sector. Not enough, in (inhomogeneous) monetary unions increases in General Gross Government debt seem to be weighted differently in terms of Government bond yields (10 years) depending on "soft" factors like reputation, credibility and pre-union monetary performance. Accordingly, despite boosting public indebtedness, some countries (Finland, France, Germany and the Netherlands) are considered more "virtuous" than other member nations with comparable debt levels (Cyprus and Spain), as diverging yield trends show. Because of lacking monetary sovereignty, high debt exposure becomes all the more destabilizing, as the Italian case demonstrates (Table 1). Once again, debtor countries have not the monetary instruments, i.e. a national central bank, own interest and exchange rates, at the natural disposal of sovereign highly indebted nations. In combination with distrusting speculative movements and lack of prompt as well as commonly decided interventions, the "explosive" mix is complete and before everybody's eyes. In any case, beside "strong" factors of weakness, there are also "softer" potential trouble spots, which are directly interlinked with the externalization of monetary policies to the benefit of a joint organization, i.e. the European Central Bank. For sure, ECB's exclusive (rather unsuccessful) focus on price stability without considering economic and financial

stability at all is particularly detrimental and inadequate if compared to the approach of the Federal Reserve, Bank of England or Bank of Japan. More astonishingly, communitarian institutions have not shown clear and tranquilizing communication policies to prevent and/or cure instability on financial markets. For instance, crisis management in the Greek case is a terrific example of disastrous communication, which has been also responsible for aggravating the degree of uncertainty feared by investors and savers worldwide. No doubt that the Euro area has still to manage who communicates with the main economic stakeholders and who has to say what. These are very simple principles, which should be well known by experts in financial communication. If not, as the European case demonstrates, financial chaos due to contradictory announcements by economic ministries, politicians and bankers is bound to occur (Beretta, 2013a). In the next section, we will therefore deepen why financial crises are a consequence of some major aspects of pathology affecting the current economic order itself. More precisely, we analytically define how some main banking concepts are nowadays interpreted and how they should be in any sound system, but we also statistically present the dangers deriving from this misconception in the Eurozone, which is characterized by a very particular currency regime.

### **1. Today's intrinsic instability of financial systems: a theoretical approach**

Curiously enough, improvements in accounting, payments or transferring procedures seem to be little worth in the ongoing financial, economic and debt crisis. Thus, as soon as European savers and investors began to be in panic, the European Financial System experienced a revival of (seemingly, forgotten) crisis symptoms like more (cf. Irish Northern Rock) or less prolonged bank runs (Der Spiegel, 2012) as well as hysteric and increasingly erratic behaviors on financial markets. For sure, financial systems worldwide – especially the European one – are plagued by a so called “crisis” of confidence’, which is at the origin of sudden down- and upward trends on stock exchange and financial markets. But do human fears really explain complexity and roots of the Great Recession (2008-2012)? Obviously not. In fact, economists are sometimes not aware of the distinction between causes and consequences, which in turn leads to misunderstand the causal nexus itself. For instance, crises of confidence are a clear manifestation of fears and unequally distributed awareness of what is going on in the world economy. There is also no doubt that these are comprehensible effects of the pathologic essence of the current non-system itself. As we have already sug-

gested (Beretta, 2011, 2012a, 2012b, 2012c), the international payments system needs to be urgently reformed by removing some major sources of disparities among national currencies and the corresponding monetary systems. In addition to it, finance and banking systems should be reformulated according to two main economic concepts, which seem to have been literally removed from collective memory.

### **2. The profound distinction between liquidity, money and savings**

Undoubtedly, implications of concepts like liquidity, money and savings are not well known in the current financial and banking sector. More precisely, there is much confusion in defining liquidity properly. For example, “in terms of markets, liquidity generally refers to the ability to buy and sell assets quickly and in large volume without substantially affecting the asset’s price” (International Monetary Fund, 2004). This definition is clearly negatively affected by the following two faults. The first one concerns the fact that the concept of liquidity should be preferably turned into another one like (secure) selling potential’, since it describes only some peculiarities without defining what liquidity really is. How could this approach not recall vague definitions as the probably most iconic one, i.e. “Money is what money does” (Walker, 1878)? Once again, economists show a pronounced tendency to describe practical implications of economic termini without caring for their intrinsic meaning. In any case, according to the quotation above, liquidity and assets seem to have similar essences. Otherwise stated, since assets have generally speaking an innate value, it looks as if liquidity would present comparable characteristics. As we will briefly see, some unordered functioning of the financial systems worldwide may be explained by keeping in mind that liquidity is often treated as a synonym for money. In fact, it is no mystery that assets are real values and have a positive worth. But is this assertion also true for money? For sure, not! While assets are namely the financial countervalue of production by human labor force, money is nothing else than the numerical container of physical wealth creation. Put in another way, money is involved in transfer payments in order to vehiculate the object of transaction (i.e. to move funds from one bank account to another one), but it is not the object of the payment itself. As Cencini (2005) recalls, money is comparable to a “flux-reflux” acting as a vehicle for transferring funds, i.e. savings. But what is then liquidity? According to several economists, “banks exist because they perform two central roles in the economy – they create liquidity and they transform risk” (Berger and Bouwman, 2009). Since nobody can create real wealth from nowhere, it is plausible that Berger and Bouwman (2009) were rather thinking of money than of liquidity. This

inference must be true, since liquidity is made of financial claims, banknotes as well as securities, which (should) represent entitlements to bank deposits, i.e. real goods/services. In the light of this last assertion, the definition of liquidity given by the International Monetary Fund (IMF) referring to the “selling potential” of assets appears to be true, although it keeps lacking a truly defining approach. Evidently enough, real and financial assets can be sold as well as purchased, but money, namely the numerical form to count real products, cannot. As a matter of fact, money’s immateriality itself prevents it, but also its intrinsic worthlessness impedes any corresponding buying or selling transaction. In turn, “liquidity” is already showing its dangerous tendency to be slippery in meaning. An asset may be “realizable at short notice without loss” in the sense that the price at which it is realizable at short notice is much the same as that at which it is realizable at longer notice. The characteristic just described is an important characteristic which is related to liquidity, but it is not (I think) liquidity. [...] An asset which can be sold after negotiation and perhaps advertising is a marketable asset” (Hicks, 1962). Following this quotation, it seems that nearly everything has remained the same or, otherwise stated, confusion with regard to the meaning of liquidity is unaltered in time. Evidently, real assets are marketable and so are financial assets. Liquidity might be referred to the degree of “marketability” of financial assets, but this would not be true for the financial claims that are the most liquid of all: banknotes. Liquidity thus remains a somehow mysterious concept. Does it define a “quality” of financial assets or has it to be identified with some of these financial assets or shall we simply identify it with money? As previously mentioned, according to modern monetary analysis liquidity must be clearly distinguished from money. If identified with easily marketable financial assets, liquidity has an intrinsic value as opposed to money, which is a simple means of conveying payments. If bankers and economists do not adopt any clear terminology to differentiate between real (i.e. savings) and nominal measures (i.e. money), there are enough reasons to claim that precisely this neglected distinction leads the banking sector to systematically over-grant inflationary loans. As we will soon enough prove, this is exactly what daily happens and prevents the economic order to be rightfully called so.

Therefore, it is fundamentally true that any rigorous analytical approach should be based on the distinction between liquidity, money, savings as well as other fundamental concepts. Now, in the same way as real and financial assets have an intrinsic value, money has no real worth attached. Obviously enough, these distinctions are not wordplay, but

only a more than necessary (and overdue) separation of two different concepts. In consideration of the fact that liquidity is often used as a substitute for the concept of money and scientific research should aim at clarifying (and not at complicating) concepts, we will from now on use the word liquidity in quotation marks (i.e. “liquidity”) as a synonymous for money as previously defined. As pointed out in some recent publication, “so as to grasp the importance of this separation [...], the theoretical conditions should be clarified. These consist of two points: (1) the distinction between savings and money, and (2) the dominant role of the entrepreneur, of production, and of the way it is financed. [...] These two functions are financial intermediation and money creation. Keynes describes two ways in which money is created: active and passive creations, which are dependent on the form of demand for money. Money is created actively when firms apply for credit from banks, which create money. The second mode of money creation stems from surplus deposits which the banks recycle among each other” (Monvoisin and Pastoret, 2003). So, what do banks and bank-like financial institutions create? Of course, money, but for sure not assets or savings, which are in turn the result of human labor. More precisely, assets have a more financial connotation, while savings are the remaining part of incomes diminished by real outflows (e.g. expenses). While handling with savings and assets banks are mere financial intermediaries, i.e. they act as neutral middlemen, who lend funds saved by some economic subjects to other agents requesting them. On the other hand, financial institutions are also involved in money creation, which has of course no intrinsic value (Goldberg, 2005) as opposed to savings though being necessary to make payments. In this case, banks act as providers of means (not: objects) of payments, which are indispensable in today’s economies.

Sadly enough, in the current financial systems there is no clear theoretical as well as practical distinction between money and savings leading to great confusion on what (and how much) banks can actually lend. Therefore, over-indebtedness and billionaire losses suffered by financial institutions are mostly not only a consequence of amateurish mismanagement and erroneous investment decisions, but also the result of missing awareness of the amount of real funds (e.g. savings) at the banks’ disposal as well as of the need to safeguard neutrality of banks’ interventions. In other words, no economic agent can create “wealth”, namely positive worth, from scratch or out of thin air. Despite that, even famous economists seem to (be willing to) ignore this binding economic principle: for example, “the central bank in cooperation with other agencies) should always be able to generate increased nominal

spending and inflation, even when the short-term nominal interest rate is at zero. [...] But the U.S. government has a technology, called a printing press (or, today, its electronic equivalent), that allows it to produce as many U.S. dollars as it wishes at essentially no cost" (Bernanke, 2002). Evidently enough, central banks and banking institutions are able to issue money out of nothing, but they cannot for sure create anything else than a monetary vacuum to be filled with real content. Of course, over-issuing money is likely to have a significant impact on stimulating GDP growth, but it also causes inflationary manifestations like turbulences on the financial and stock exchange markets (Nelson, 2008). It seems incredible, but it is nonetheless equally true to assert that banks do not have a precise method to determine how many funds (e.g. savings) they have on their accounts and, therefore, how many loans they can grant.

How could it be otherwise, if the majority of economists still think of banking institutions as providers of credits stemming not only from deposited savings, i.e. net incomes originated from production, but also from bogus claims created out of nothing, namely by activating the printing press and over-supplying "liquidity"? More precisely, nowadays banks do not have separate departments registering on the one hand in- and outflows of savings and, on the other hand, in- and outgoing 'liquidity' so that real (i.e. lendable) as well as nominal (i.e. non-lendable) measures are put into the same account ("[B]eing confused into the same bookkeeping, monetary creation and financial intermediation coexist, so that the bank never knows the amount of deposits it has at its disposal in order to grant its loans on the financial market" (Schmitt, 1984 (own translation)). In absence of two different departments banks are therefore not able to differentiate between these two very different typologies so that they either lend/invest what they do not have (e.g. savings) or what they have unconsciously over-issued (e.g. "liquidity").

This problem is not a new discovery, since the Bank Act of 1944 reorganizing the Bank of England already prescribed the practical separation between the Issue Department and the Banking Department (Parliament of the United Kingdom, 1844). Sadly enough, this departmentalization has never taken place, but it is an historic proof of the matter's relevance. "The real problem is the lack of information as to the nature of payments. Under the existing banking framework, there is no way to discriminate between monetization and ordinary lending. This allows for much confusion between financial relations resulting from payments creating new incomes and financial relations resulting from the transmission of existing incomes" (Bradley, 2001). Follow-

ing also Cencini (2009), we argue that precisely this missing bookkeeping distinction between concepts like savings (i.e. income) and money and, therefore, between a Financial (or Credit) Department and an Issue Department is also (for sure, not only) at the origin of over-indebtedness in the financial system, which in turn leads to economic turmoil and shrinking confidence in economic sustainability. Let us now formulate the following scenarios in order to show why the current situation is particularly prejudicial. The common premise to these four cases is that savings ( $s$ ), i.e. bank deposits, at one hypothetical bank's disposal correspond to 100 ( $s = 100$ ). This simplified example plays around the consequences of either lending out of savings characterized by a real content or lending out of over-issued "liquidity", which is manifestly inflationary, and their effects in case of total reimbursement of the loan or only partial restitution of the credit due to debtor's bankruptcy. In scenario 1, no over-issuance of "liquidity" occurs, since granted loans are lower than total savings ( $80(l) < 100(s)$ ). The repayment of the outstanding loan by the debtor is also complete, if we abstract from interests on it because of simplicity.

$$80(l) [\textit{loan out of savings}] = 80 (rl) [\textit{loan reimbursement out of income}]. \quad (1)$$

Systemic order is therefore secured every time that "liquidity" has not been over-issued. The same is also true in scenario 2, although we introduce a new hypothesis, namely partial bankruptcy. Accordingly, the loan benefiter will be only able to retribute a smaller part ( $60 (rl)$ ) of the initial loan granted by the bank ( $80 (l)$ ).

$$80(l) [\textit{loan out of savings}] > 60 (rl) [\textit{partial loan reimbursement out of income}]. \quad (2)$$

As easily predictable, the bank will experience a financial loss ( $20 (l)$ ), which is obviously enough a prejudicial occurrence, but it does not present any manifest sign of monetary pathology. For sure, the debtor benefits from the diminished loan reimbursement, while the bank has to compensate for the unexpected loss, but that's it. Insolvent and/or illiquid debtors are very common in economic history so that banks are mostly used to prevent such losses. Things dramatically change, if we introduce a new variable, namely the over-issuing hypothesis of "liquidity", in order to grant credits in excess of savings. In the same way as in the first case, scenario 3 is characterized by the total reimbursement ( $120 (rl)$ ) of the loan granted by the bank ( $120 (l)$ ). Once again, savings, i.e. lendable bank deposits because of their real content, remain stable at 100 ( $s = 100$ ).

$$100 (l) [\textit{loan out of savings}] + 20 (l) [\textit{loan out of over-issued "liquidity"}] = 120 (rl) [\textit{loan reimbursement out of income}]. \quad (3)$$

It is particularly easy to observe that, although the debtor is not insolvent, only one part of the bank’s loan (100) is covered by real goods/services, while the remaining part (20) is manifestly inflationary and created out of nothing. While money has to be created *ex nihilo* to vehiculate transactions and has therefore no real value attached, it cannot be lent as if it were savings, which are undoubtedly marked by their economic worth stemming from the monetization of human labor through salary payments. It follows that the debtor has to collect enough income (120 (*rl*)), namely revenues from the production of goods and services, to refund the bank of the previous loan granted out of savings (100 (*l*)) as well as of over-issued “liquidity” (20 (*l*)). In addition, there is no question that the financial system as a whole benefits – although only temporarily – from this over-concession of credits, since it expects higher interest and debt principal payments than if it would have lent only savings (*s* = 100). Despite this fact, the economy as a whole and especially the real sector become exposed to inflationary pressures, greater likelihood of financial instability and diminished purchasing power due to the softened ratio between product and money units, which is always equal to 1 in any ordered economic system:

$$100 \text{ [goods and services]} = 100 \text{ [money units to monetize the physical production]}. \quad (3)$$

In scenario 4, we now introduce the probability of bankruptcy, namely the eventuality of reduced loan reimbursement by the debtor (100 (*rl*)), while we maintain the hypothesis of over-granting loans (120 (*l*)) as compared to actual savings (*s* = 100):

$$100 \text{ (l) [loan out of savings]} + 20 \text{ (l) [loan out of over-issued "liquidity"]} > 100 \text{ (rl) [partial loan reimbursement out of income]}. \quad (4)$$

This case is very similar to what happened just before as well as during the Great Recession (2008-2012). As a matter of fact, banks have continuously over-issued “liquidity” (20 (*l*)) and lent it in addition to available savings’ (100 (*l*)). Because of erroneous investment decisions and hazardous behaviors of the debtors themselves, bank institutions have also suffered from huge financial losses (120 (*l*) > 100 (*rl*)). Not enough, this negative result is not comparable with scenario 2 where there is no over-issuance of money, namely any inflation risk. On the contrary, scenario 4 implies not only wide spreading economic losses, which are all the more detrimental to banking and financial systems of monetarily unified countries, but also significant menaces due to the over-supply of empty ‘liquidity’ bustling from one economic sector to another. In the light of this, let us sum up our main results and deepen some subsidiary aspects (Table 2).

Table 2. Credit concession with or without over-issuing “liquidity” in combination with debtor’s bankruptcy hypothesis

Scenario	Loan out of savings	Loan out of over-issued “liquidity”	Loan refunding	Losers and winners		Remarks
1	80	-	80	None		None
2	80	-	60	Bank	Debtor	Partial debtors’ insolvency
				-20 (loss due to debtor’s bankruptcy)	+20 (saved amount)	
3	100	20	120	Bank	Debtor	Inflation and destabilizing effects on the exchange, financial and stock markets
				+20 (gain due to over-issuing)	-20 (loss due to over-issuing)	
				-20 (loss due to inflation and destabilizing effects)		
4	100	20	100	Bank	Debtor	Partial debtor’s insolvency; inflation and destabilizing effects on the exchange, financial and stock markets
				-20 (loss due to debtor’s bankruptcy)	-20 (loss due to over-issuing)	
				+20 (gain due to over-issuing)	+20 (saved amount)	
				= 0	= 0	
				-20 (loss due to inflation and destabilizing effects)		

Source: Author’s own results processed.

As Table 2 unambiguously shows, there are only two cases characterized by net losses affecting the national economy itself: scenario 3 and scenario 4. Oddly enough, we are nowadays experiencing continuous switches from over-issued “liquidity” and solvent debtors (scenario 3) to over-issued “liquidity” and bankrupt debtors (scenario 4). In these two cases,

the gains either of the banking sector or the debtors, i.e. households and non-financial corporations, do not offset each other as in scenario 2. In fact, net losses derive from over-issued “liquidity”, which is detrimental to the economy as a whole. It is therefore, not surprising that boom-bust cycles become all the more recurrent and adapt their peculiarities to changing

contexts, as it is for instance true for inflation, which manifests its effects in a different way as compared to the Seventies and Eighties. The next section deals in turn with some other major structural factors threatening the proper working of financial systems, whose anomalous configuration is also (at least, partly) responsible for the enduring economic, financial and debt crisis in Europe.

### 3. The crumbling pyramidal structure of banking systems

If banking systems by the book should be compared with a geometrical form, then they would be a pyramid. Why is it so? Certainly, because of the fact that the central bank is placed at the top, while the remaining public and private banks (or other financial intermediaries) are positioned in the middle and on the bottom of this pyramidal structure. From a procedural point of view, banks tend to use central bank money (and not their own acknowledgements of debt) in order to settle their commercial as well as financial transactions (European Central Bank, 2004). “Of course, we may ask why banks prefer using central bank money rather than, say, some other means of settling their debt. First the answer stems from an essential principle of monetary economics, namely, that nobody can finally pay by its own acknowledgement of debt. Clearly, owing to the nature of money and the mechanics of payments (Rossi, 2007), even if banks were not legally required to settle payments in central bank money, they would have to use such money in order for their obligations on the inter-bank market to be paid finally” (Rochon and Rossi, 2011). Beside this, central banks are often considered to be a third party in national banking systems, which should ensure financial stability. Starting from the Eighties onward, banking and financial systems have experienced significant privatization

and deregulation measures, which have in turn chipped away at central banks’ responsibilities. Some economists argue that precisely this pyramidal configuration is now under siege contributing to the well-known hazardous behaviors of financial intermediaries and diffuse financial instability (Giannini, 2004). Without considering growing interbank credits, which can be subject to sudden stops due to loss of confidence, the weaker solidity of the pyramidal banking structure is also reflected by scarce surveillance on financial markets and procyclical lending policies leading to over-lending in good times, which in turn increases the risk of inflationary expansion and diffuse bubbles (cf. Ireland, Spain), and under-lending in bad times due to irrational fears (cf. Italy). As we have already pointed out, the combination of these two elements is particularly prejudicial for the sustainability of the European currency regime itself, since communitarian policies are affected by the fact that the European strategy is conceived as a “one-size-fits-all” solution despite diverging trends in different country groups (f.i. Finland, Germany, the Netherlands *versus* Greece, Italy, Portugal, Spain). In any case, the solution of the Euro crisis requires removing huge infra-European imbalances and fine-tuning the configuration of the communitarian economic system. If not, the Eurozone will be affected by widening structural discrepancies, which will soon or later lead to its breakup.

### 4. On the way of restabilizing the European financial system?

There is no doubt that some early crisis indicators (and their precise meaning) have been neglected over time. For instance, data on *domestic credits provided by the banking sector (% of GDP)* are particularly eye-opening (Table 3).

Table 3. Domestic credits provided by the banking sector (% of GDP)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Change	Remarks
Austria	122.2	121.6	122.3	130.3	130.0	127.0	130.9	140.2	137.4	135.3	133.4	+11.2	-
Cyprus	-	-	-	-	-	-	280.2	303.0	315.8	326.1	344.1	+63.9	FC⇒SDC
Euro area	119.2	121.2	122.3	127.3	131.2	138.3	142.8	152.6	156.0	153.4	153.5	+34.3	-
Finland	62.9	66.9	69.5	77.5	82.4	85.1	87.9	98.1	101.3	101.5	104.1	+41.2	-
France	103.5	105.4	106.1	109.0	115.1	122.0	124.3	128.8	132.7	133.1	136.4	+32.9	-
Germany	143.1	141.7	138.7	137.2	131.7	124.7	126.6	133.1	131.0	124.8	123.6	-19.5	-
Greece	99.6	93.8	95.4	106.6	109.0	113.6	115.7	115.9	148.9	153.2	135.5	+35.9	SDC⇒FC
Ireland	108.7	114.5	133.4	159.0	179.6	196.2	208.7	222.9	232.5	222.0	202.1	+93.4	FC⇒SDC
Italy	96.3	102.0	102.9	107.4	111.6	128.2	132.0	141.6	155.5	157.2	167.6	+71.3	SDC⇒FC
Netherlands	153.1	160.2	169.7	176.6	177.7	197.6	196.0	224.2	212.2	211.4	216.0	+62.9	-
Portugal	137.8	138.1	139.2	144.0	155.2	165.6	177.7	195.1	209.1	204.0	198.7	+60.9	SDC⇒FC
Spain	123.3	131.6	140.0	159.2	177.2	197.7	214.5	229.1	234.4	230.9	221.5	+98.2	FC⇒SDC
Average	115.4	117.9	121.8	130.4	136.4	145.1	161.4	173.7	180.6	179.4	180.3	-	-

Source: Author’s own results processed from The World Bank Group (2013).

As the reader may easily see, there have been some “virtuous” countries (f.i. Austria, Finland, France, Germany), whose domestic credit expansion remained affordable. In turn, Cyprus, Ireland and Spain have experienced a significant increase in loans as compared to GDP and/or they already ranked above the average (cf. shadowed cells). In these countries, the crisis has originated in the banking and financial system and has then spilled over to the Government, which intended to rescue defaulting financial institutions (Financial crisis (FC)  $\Rightarrow$  Sovereign debt crisis (SDC)). On the other hand, if we look at countries like Greece, Italy and Portugal, it appears that the opposite has happened, namely that high public indebtedness (and large shares of public bonds in bank portfolios) have caused impressive capital flights and loss of confidence in the banking sector too (Sovereign debt crisis (SDC)  $\Rightarrow$  Financial crisis (FC)). Furthermore, Table 3 proves that there is no precise criterion, which bank institutions are subject to with specific regard to the amount of grantable credits. In fact, if we abstract from astonishing infra-European discrepancies in credit concession, credits exceed the Gross Domestic Product (GDP), i.e. the total yearly real production. Although this is very frequent on a worldwide scale, it does not mean that it corresponds to how financial systems should be properly conceived. If domestic credits (DC) provided by the banking sector surpass the real income generated during the year (GDP), it means that the exceeding amounts are created from scratch and have no real content, i.e. they are likely to have inflationary repercussions. Oddly enough, over-issuing : “liquidity” cannot be considered at the origin of any “wealth”. Perhaps, the best proof of this matter of fact is represented by the missing inclusion of money instruments into GDP, which remains despite “ever-green” criticism against its adequacy (European Commission, 2009; New York Times, 2010) the only measure of new incomes, namely of lendable values. In addition, domestic credit concession seems to be highly reliant on some “soft” components like credit granting procedures, criteria as well as cultural aspects. For instance, it is no mystery that German policy makers are particularly interested in safeguarding the economic stability and reducing the impact of positive inflation rates. This can be for instance a rather plausible explanation of the limited growth in the concession of domestic credits (see, Table 3).

Nonetheless, it is undeniable that there is no sound (and objective) criterion for granting credits. As we have seen, loans should not exceed the yearly amount of GDP, since the contrary would mean that the banking and financial system has over-issued “liquidity” at the expenses of the purchasing power

of incomes in general. Of course, it subsists no automatism between over-issuing money and financial turbulences, although it cannot be considered to be a mere coincidence that EMU countries more prone to grant credits (f.i. Cyprus, Ireland and Spain) have been subject to significant bailout episodes in the financial sector. This has undoubtedly been the case in other nations too (f.i. Germany), but these events are more likely to be caused by financial interconnectedness with distressed foreign bank institutions and/or inadequate investment decisions. It remains anyway dramatically true that, unless there will be no clear criteria defining that over-expansion of the monetary basis as compared to the total amount of goods and services (GDP) is pathologic, financial stability will all the more depend on the financial architecture of the national system savers and investors belong to (Kwok and Tadesse, 2006) and on the adequacy of banking laws (f.i. sufficient capital requirements or pervading controls of the banking and financial sector). As a matter of fact, “strengthening official supervisory power or increasing capital requirements can have a discernible positive impact on bank efficiency through a number of channels [...]. The variables capturing regulatory restrictions on bank activities and private monitoring appear to be affecting adversely the efficient operation of banks” (Chortareas et al., 2012). In the last months the European Commission seemed to be willing to strengthen supervisory powers of the European Central Bank, although it is even questionable, if these plans will be implemented (“Today’s proposals for a single supervisory mechanism (SSM) for banks in the Euro area is an important step in strengthening the Economic and Monetary Union (EMU). In the new single mechanism, ultimate responsibility for specific supervisory tasks related to the financial stability of all Euro Area banks will lie with the European Central Bank (ECB)” (European Commission, 2012a)). The fact is anyway that starting from January 2003 to September 2013 the outstanding amounts of loans granted by monetary and financial institutions (MFIs) have grown from Euro 2,972.68 bn. up to Euro 4,399.34 bn. (European Central Bank, 2013b) registering an increase of 47.99%, which finds of course no correspondence in terms of GDP. Thus, the latter soared from Euro 7,466.32 bn. to forecasted Euro 9,583.71 bn., which correspond to an increase of 28.36% (Eurostat, 2013a).

Furthermore, discrepancies are all the more retrievable in other categories like *MFI interest rates – Loans to households* and *MFI interest rates – Loans to non-financial corporations*, whose main trends have been summed up in Table 4. According to data, appears that there is a strong correlation be



tween shrinking interest rates on loans to both debtor typologies and financial crises becoming sovereign debt crises (cf. Ireland and Spain, FC  $\Rightarrow$  SDC). In turn, less correlation can be found in the case of Cyprus (FS  $\Rightarrow$  DC) as well as Italy (SD  $\Rightarrow$  FC), although data for the first have remained substantially stable abstracting from very light changes. With specific regard to Italy, it is also plausible to

claim that, given the fact that the high public debt level is well known since the Nineties, decreasing MFI interest rates on loans show more consideration for shocks occurring on the national financial market than for high indebtedness. In the light of this, Euro area data seem to indicate rather a phenomenon spreading from financial to sovereign debt crises than the opposite.

Table 4. MFI interest rates on loans to households and non-financial corporations: some main trends in the EMU (as %)

		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Trend	Remarks
Cyprus	Hh	-	-	-	-	-	7.43	7.18	7.76	7.94	7.81	↑	FC $\Rightarrow$ SDC
	Nfc	-	-	-	-	-	7.26	6.00	6.64	7.39	7.29	↑	
Euro area	Hh	9.95	9.62	9.67	10.03	10.45	10.46	8.99	8.54	8.79	8.32	↓	-
	Nfc	4.06	3.98	3.99	5.08	6.08	5.38	3.28	3.50	4.43	3.79	↓	
Greece	Hh	14.09	13.41	13.07	13.80	14.47	14.83	14.08	11.08	11.23	10.00	↓	SDC $\Rightarrow$ FC
	Nfc	5.13	5.04	5.41	6.30	6.83	6.18	4.70	6.34	7.26	6.46	↑	
Ireland	Hh	12.93	13.09	13.07	13.40	13.52	13.06	12.60	12.60	12.64	12.59	↓	FC $\Rightarrow$ SDC
	Nfc	4.35	4.38	4.55	5.68	6.75	5.95	3.32	3.87	4.69	4.04	↓	
Italy	Hh	8.44	8.39	8.16	8.47	8.85	8.78	6.60	6.90	7.44	7.31	↓	SDC $\Rightarrow$ FC
	Nfc	4.06	4.04	4.07	5.03	5.98	5.31	2.95	3.18	4.95	4.40	↑	
Portugal	Hh	9.80	9.48	9.79	10.56	11.57	12.18	10.64	11.53	12.99	15.11	↑	SDC $\Rightarrow$ FC
	Nfc	5.63	5.52	5.73	6.52	7.25	7.26	4.95	5.92	7.53	6.53	↑	
Spain	Hh	13.29	12.08	12.92	12.18	13.56	13.43	12.34	8.38	9.65	9.75	↓	FC $\Rightarrow$ SDC
	Nfc	3.89	3.74	3.69	14.83	5.96	5.51	3.63	3.78	4.95	4.91	↑	

Source: Author's own results processed from Eurostat (2013c, 2013d).

Nonetheless, many caveats are indispensable, since any mere observation of these trends cannot abstract from other data (f.i. public debt level, Government bond yields). Certainly enough, MFI interest rates on loans are not a highly reliable measure of imminent crises as other early indicators, although these data should be at least used in an auxiliary way to prevent similar crises. This paper does for sure not deal with summing up the main reform actions of the European Union (EU) being necessary to strengthen its financial system. There is no doubt that the introduction and/or reformulation of some governance bodies (f.i. the European Systemic Risk Board (ESRB) and the European Supervisory Authorities (ESAs)) is a great step toward a renewed economic and financial system, but these plans lack structuralism, namely the awareness of to implement in a structured way. Macro- and micro-prudential supervision bodies are undoubtedly necessary in any increasingly interconnected economy ("The continued increase in market concentration caused by merger and acquisition activities since the late 1990s is likely to decelerate the process for the EU to reap the benefits from enhanced competition" (Chen, 2007)). Nonetheless, if there is for instance no clear distinction between inherently different concepts like liquidity, money and savings, the supervising authorities will find it hard to cope with crisis prevention. That is to say, they will not

be able to spot any structurally incumbent danger. Not enough, negative consequences deriving from this missing distinction are aggravated by "the transition that the financial industry has made from a strictly controlled environment to a much freer one. [...] Before the transition, financial institutions were in many cases subject to strict controls, maintained for macro-economic purposes, e.g., on the quantity of credit extended, or on the interest rates paid on deposits. Many of the important decisions, such as how much to lend, were taken out of the commercial banks' hands. [...] The removal of controls did two things. First, it placed more business decisions in the hands of the financial institutions themselves. Second, by allowing more competition, it increased the scale of the financial consequences of bad business decisions" (Allen and Wood, 2006). Claiming that something wrong has gone and is even today going on is no object of scandal, since it is easily provable with no need of historical dataseries. In fact, let us observe the *integrated economic and financial accounts by institutional sector* and, more precisely, the big changes occurred between 2006 (Q4) and 2012 (Q1) concerning households (Hh), non-financial corporations (Nfc), monetary and financial institutions (MFIs), other financial intermediaries (Ofi), the General Government (GG) and the rest of the world (RW).

Table 5. Euro area's integrated economic and financial accounts by institutional sector (2006 Q4-2012 Q1), Euro bn.

	Hh		Nfc	MFIs		Ofi		GG		RW		
	06 <sub>04</sub>	12 <sub>04</sub>	06 <sub>04</sub>	12 <sub>04</sub>	06 <sub>04</sub>	12 <sub>04</sub>	06 <sub>04</sub>	12 <sub>04</sub>	06 <sub>04</sub>	12 <sub>04</sub>	06 <sub>04</sub>	12 <sub>04</sub>
Financial assets	16.518.6	19.363	12.879.8	17.055	19.153.0	35.464	14.838.5	23.312	2.669.5	4.121	12.663.2	17.879
Currency/deposits	5.181.6	6.926	1.505.6	2.073	2.005.2	11.783	1.878.5	3.037	526.2	816	3.459.7	3.576
Debt securities	1.473	1.368	306.4	393	3.323.1	6.951	4.255.8	6.136	217.9	455	2.565.5	4.746
Loans	23.8	77	1.619.4	3.092	10.627.7	13.424	1.565	4.293	366.4	686	1.324.1	2.195
Shares/other equity	4.770.7	4.268	6.920.9	7.761	1.638.4	1.780	6.476.4	9.153	992.3	1.435	4.638.2	6.528
Other financial assets	5.069.4	6.725	2.527.4	3.735	1.379.9	996	662.7	694	566.6	729	676.5	833
Liabilities	5.318.3	6.807	20.571.8	26.187	19.459.3	34.393	14.925.9	23.021	6.814.9	10.199	11.454.5	16.058
Currency/deposits	-	-	0.0	31	11.819	25.170	205	32	336.5	275	2.196.5	2.702
Debt securities	-	-	689.4	1.018	2.732.3	5.393	1.259.3	2.904	5.012.3	7.226	2.448.7	3.509
Loans	4.920.2	6.188	6.093.7	8.462	-	-	1.371.5	3.831	1.077.6	2.067	2.063.4	3.221
Shares/other equity	-	8	11.292.0	12.761	3.133.5	2.582	6.720.2	9.637	4.5	1.760	4.286.7	5.934
Other financial liabilities	398.1	611	2.496.8	3.915	1.774.6	1.249	5.370	6.617	383.8	628	459.3	692
Net financial worth	11.200.3	12.557	-7.692.0	-9.132	-306.3	1.071	-87.5	291	4.145.3	-6.078	-	-

Source: Author's own results processed from European Central Bank (2007, 2013a).

As Table 5 eloquently shows, Euro area's integrated financial accounts have experienced a notable deterioration in terms of asset or liability typologies as well as in absolute terms. The highlighted cells depict this negative trend, which can be at the origin of further crises. For instance, *currency and deposits* as well as *debt securities* on the liability side of monetary and financial institutions (MFIs) soared respectively by 112.96% and 97.38% within five years. In turn, households' large net worth has been mainly financed through increasing loans (change: 25.77%), while non-financial corporations (Nfc) show the same trend toward accumulating more debt (change: 38.86%). But all above this, there is another tendency, which is far more prejudicial, namely the impressive increase in economic and financial stock volumes of monetary and financial institutions (MFIs) as well as of other financial institutions (Ofi). In fact, in 2006 (Q4) there was still a clear predominance of the real sector (Hh + Nfc + GG + RW  $\Rightarrow$  Euro 44,731.1 bn. (assets), Euro 44,159.5 bn. (liabilities)) as compared to the financial sector (MFIs + Ofi  $\Rightarrow$  Euro 33,991.5 bn. (assets), Euro 34,385.2 bn. (liabilities)). On the contrary, in 2012 (Q4) the role of the real sector (Euro 58,418 bn. (assets), Euro 59,251 bn. (liabilities)) nearly equaled the impact factor of the financial sector as a whole (Euro 58,776 bn. (assets), Euro 57,414 bn. (liabilities)). This result is obviously not affordable in the medium-long term, if we consider that the largest contribution to the yearly GDP comes from real activities. The exponential increase experienced by the European financial sector in terms of stock volumes (72.91% (assets), 72.32% (liabilities))

as compared to the real sector (30.60% (assets), 34.17% (liabilities)) would seem unexplainable, if we would not consider inflationary mechanisms of over-issuing "liquidity". Since we do, we have good reasons to get worried about these detrimental trends. In any case, Table 5 seems to predict that shares and other equity are likely to remain stable or augment sluggishly, because they become less appealing in the case of enduring financial turbulences on stock markets, while loans will continue to increase despite tightening banking and economic policies. Furthermore, it is likely that short-term debt securities and long-term debt securities will grow more rapidly as almost every debt instrument typology.

Since communitarian institutions have progressively perceived the even more acute danger deriving from rapidly deteriorating economic variables in monetary unions, they have introduced some main reforms aiming especially at strengthening micro- and macro-prudential supervision. These reorganization measures are also a direct consequence of the de Larosière Report published in 2009, which tries to reformulate some main aspects of economic weakness ("The financial system is global and requires a global consistent infrastructure" (Masera, 2010)). Of course, the impact of these new proposals and any new Directives (f.i. the Capital Requirements Directive 4 (CRD4)) has to be carefully analyzed over time, but, as we have already seen, in the absence of clear definitions of basic economic concepts (and their implications) no regulatory framework will cure the patient. In other words, if it lacks a correct diagnosis, there will be no effective course of treatment. The European analytical framework is complex and articu-

lated, we grant, but it aims at curing symptoms without having clear in mind what are the roots of the current crisis. At the risk of exaggerating, no difficult ratio measures are needed to calculate capital requirements: in fact, it would suffice that banks would not over-issue “liquidity”, but would instead lend out of savings, i.e. out of bank deposits. Furthermore, if they would grant loans out of money, since they would expect future earnings, these measures should be limited in time and, obviously enough, over-issued “liquidity” should be reabsorbed and set off once corresponding new revenues have been originated.

Before concluding our analysis, it seems also necessary to deal with two “evergreen” proposals in the Euro area, namely the introduction of a ‘Tobin tax’ and the creation of a European Credit Rating Agency (ECRA). According to some economists and politicians, the first policy measure would reduce speculation and panic episodes in the financial sector, while the second one would imply more realistic ratings to be assigned by European authorities (as opposed to the Anglo-Saxon competitors *Standard and Poor’s*, *Fitch* and *Moody’s*). Hilariously (or dramatically) enough, none of these policies is adequate for resolving the crisis. In fact, any kind of ‘Tobin tax’ would impose a relatively high burden on investments as well as financial transactions with no effects in terms of reduction of speculative capital movements and/or trading with toxic securities. As easily graspable, monetary and financial institutions (MFIs) would suffer additional economic costs, which would be in turn passed off to savers, retirees as well as investors. These sacrifices would be probably acceptable, if speculation would soon belong to the past. But precisely this assumption is not verified, since financial intermediaries would not only continue to trade (sometimes, even unconsciously) with toxic financial instruments, but they would also keep creating securities backed by no “wealth” or, in less diplomatic terms, irremediably generated out of thin air.

Let us now turn our attention to the hypothetical European Credit Rating Agency (ECRA), whose ratings would be “fully independent and autonomous, i.e. not bound by instructions vis-à-vis the Member States, the Commission and all other public bodies as well as the finance industry and other CRA” (European Parliament, 2011). Nonetheless, the creation of a similar agency during any severe sovereign debt crisis, which is aggravated by heavy distrust in the sustainability of the Euro area itself, would be instantaneously affected by the same ‘original sin’, namely lack of confidence. In fact, it is pretty obvious that financial markets would not trust in ECRA’s ratings to be assigned to European countries, if ECRA’s financial assessment would result in a more favorable rating than those assigned by *Standard and Poor’s*, *Fitch* or *Moody’s*.

As easily predictable, higher ratings assigned to Greece or Portugal by any communitarian rating agency, which would have been established during the crisis, would not be seen as impartial. The logical consequence would be therefore that nothing would change. Obviously enough, the hypothetical European Credit Rating Agency (ECRA) would have been credible, if it would have been founded in 2002, but for sure not as a countermeasure during financial turmoil. It is in fact evident that the latter scenario would contravene nearly every previous finding on financial communication, credibility or the like. In the last months, the banking sector has also focused its attention on Erkki Liikanen’s proposal, who is the Governor of the Bank of Finland. In fact, “the Group has concluded that it is necessary to require legal separation of certain particularly risky financial activities from deposit-taking banks within the banking group. The activities to be separated would include proprietary trading of securities and derivatives and certain other activities closely linked with securities and derivatives markets” (High-level Expert Group on reforming the structure of the EU banking sector, 2012). In our opinion, this proposal seems to be willing to tackle some major sources of instability of banking systems and, far more interesting, it pleads for a pretty innovative distinction between a department being responsible for granting commercial credits as well as administrating deposits and a more risky institutional sector pertaining to the bank itself. Of course, this is not precisely the reform process envisaged in this paper. Nonetheless, this last assertion is an excellent proof of the intrinsic riskiness (and non-riskiness) of some financial instruments with respect to others. If we complement this matter of fact with another (profoundly true) distinction, namely between asset/liability typologies backed (or not) by any real content, it appears pretty clear that there is a strong link between riskiness and anything created “out of nothing” (in other words: devoid of any real content) as well as non-riskiness and anything backed by real wealth (in other words: savings and bank deposits).

## Conclusion

Unless the world economy will grasp the profound meaning of basic economic concepts and their practical implications, there will be enough place to lay the foundations for over-issuing and therefore, destabilizing the financial system as a whole. But what should be Europe’s role in this context? As we have seen, the European Monetary Union should be particularly motivated to reform the current state of (dis)order, since longevity of the European project is particularly exposed to negative influence of economic crises. In fact, super-fix exchange rate regimes are continuously subject to shaping speculative pressures during financial turmoil, which become all the more detrimental in

the presence of huge and also widening discrepancies in terms of fundamental economic variables. One thing is nevertheless for sure: there is no way to circumvent these binding economic principles.

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## Appendix

Table 1. General government gross debt and government bond yields (10 years) of EMU countries

	General government gross debt (as % of GDP)			Government bond yields, 10 year notes (as %)			Remarks
	Pre-EMU level (as of 2001 where not otherwise indicated), in percent	2012	Change, in percent	Pre-EMU level (as of December 2001 where not otherwise indicated)	September 2013	Change, in percent	
Austria	66.8	73.4	+6.6	4.95	2.34	-2.61	-
Belgium	106.5	99.6	-6.9	4.97	2.75	-2.22	-
Cyprus	58.8 (2007)	85.8	+27.0	4.6 (2007)	6.0	+1.4	Bailout rumors
Estonia	6.7 (2010)	10.1	+3.4	-	-	-	-
Finland	42.5	53.0	+10.5	4.98	2.19	-2.79	-
France	56.9	90.2	+33.3	4.87	2.49	-2.38	-
Germany	59.1	81.9	+22.8	4.74	1.89	-2.85	-
Greece	103.7	156.9	+53.2	5.13	10.15	+5.02	EFSF loans
Ireland	35.1	117.6	+82.5	4.93	3.95	-0.98	EFSF loans
Italy	108.2	127.0	+18.8	5.05	4.54	-0.51	Bailout rumors
Luxembourg	6.3	20.8	+14.5	4.51	2.05	-2.46	-
Malta	62.3 (2007)	72.1	+9.8	4.81 (2007)	3.28	-1.53	Bailout rumors
Netherlands	50.7	71.2	+20.5	4.89	2.32	-2.57	-
Portugal	53.5	123.6	+70.1	5.01	7.06	+2.05	EFSF loans
Slovak Republic	29.6 (2007)	52.1	+22.5	4.61 (2007)	3.15	-1.46	-
Slovenia	26.4 (2006)	54.1	+27.7	3.90 (2006)	6.56	+2.66	-
Spain	55.6	84.2	+28.6	4.97	4.42	+0.55	Bailout rumors

Source: European Central Bank (2013) and Eurostat (2013b).