

Enhanced Debt Management for the Eurozone: Reconnecting public debt management with monetary policy to attain sustainable growth and national debt

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Abstract

Unconventional approaches to suit unusual circumstances have become acceptable in monetary policy, a formerly highly conservative discipline. In this paper it is argued that unconventional approaches should also be considered in sovereign debt management, in order to contribute towards resolving the eurozone sovereign debt crisis. First, the Troika crisis lending to indebted sovereign borrowers in the eurozone is reviewed and compared with standard IMF post-crisis lending. The main difference and shortcoming is the unsustainable character of the eurozone approach, which is mainly due to the omission of effective demand stimulation components. To address this and other shortcomings, the features of an ideal alternative funding tool are identified. It is found that it can be implemented as part of enhanced public debt management by each nation's debt management office.

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1. Introduction

The European sovereign debt crisis is closely linked to the crisis in the banking systems in the affected countries. The linkage takes several forms. On the one hand, there is an historical link, as government-funded bank bail-outs may be the cause of the fiscal crisis (such as in Ireland) or at least will have contributed to a worsening of the sustainability of the fiscal situation.² On the other is the mutually reinforcing link: sovereign credit rating and government bond valuations (and hence public funding costs) are affected by the state of the banking sector, since the sovereign is seen as the guarantor (or even lender of last resort) of the banking sector. The stability of the banking sector is affected (such as in CDS rates, equity valuations and banks' credit ratings) by the perception of the state of public finances, since banks are major owners of government bonds (with a well-known home country bias). The bail-out

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² For instance, it has been argued that the cause of the 'recurring banking crises' is excess lending for transactions that do not contribute to GDP (i.e. asset transactions), which are unsustainable (since aimed at capital gains, not income streams) and, if large enough, bring down the banking system (Werner, 1997, 2005). During such bank credit-driven asset boom periods, tax revenues tend to rise, which encourages governments to produce optimistic budget outlooks and expand public spending. When such credit creation for non-GDP transactions slows and eventually contracts, asset prices fall, and banks, burdened with bad debts, reduce total credit creation. This reduces nominal growth and hence also tax revenues, resulting in rapidly deteriorating fiscal conditions, as the deficit/GDP ratio rises due to a higher numerator and simultaneously a smaller denominator.

packages often directly reflect this link, combining banking sector restructuring measures with sovereign bailouts (such as, most visibly and recently, in the case of Cyprus).

More broadly, the crisis has highlighted a close link between sovereign bond markets, debt management policy and fiscal policy on the one hand and on the other the state of the banking system and hence ultimately also monetary policy. Several factors have contributed to these linkages. These include relatively recent ones, such as the Basel regulations (which since their introduction in 1988 as ‘Basel I’ have attached a zero risk-weighting to government bonds issued by OECD member states, thus requiring no capital for banks to purchase such bonds; and which have since ‘Basel II’ encouraged the pervasive use of Value-at-Risk as dominant risk measurement methodology, arguably reducing the capital cover of large banks), the increased reliance on credit rating agencies (whose rating behaviour tends to be lagging and thus enhance pro-cyclicality), international accounting standards on marking to market of traded securities (increasing volatility, contagion and pro-cyclicality, as any change in government bond prices immediately affects the state of bank balance sheets, among others) and increased securitisation (thus expanding the scope of the impact of mark-to-market rules, since the latter apply to traded instruments). The list of factors also includes long-standing fundamental ones, such as the functioning of banking systems as highly leveraged operations with a small capital base (usually less than 10%, so that a reduction in the value of bank assets, consisting mainly of bank loans and securities holdings, by only about 10% will render the banking system insolvent).³ Related to this, in the current system banks are reliant on each other to balance their balance sheets, which results in automatic contagion and renders the smooth function of the inter-bank market systemically critical. Among the fundamental factors also ranks the widespread reliance of finance ministries and debt management offices on technical advice from bond underwriters, who are in fact interested parties, with an incentive structure favouring the issuance of traded instruments in public debt management.⁴

It is not the purpose of this contribution to examine these factors and their relative importance. Instead, the aim is to consider the sustainability of the conventional approach to tackling sovereign debt crises in the recent European case, and highlight the role of debt management in the propagation, but also resolution of the existing problems. Specifically, the possibility of ‘unconventional’ or what is here called

³ A number of proposals have been put forward to tackle this issue, on occasion also referred to as the ‘fractional reserve banking’ model. These include Kotlikoff’s (2010) ‘narrow banking’ plan, Benes and Kumhof’s (2012) ‘Chicago Plan revisited’ and Dyson et al. (2010) with the updated Robinson and Huber (2001) plan. Alternative proposals preserving the special status of banks have also been tabled (see, for instance, Werner, 2010).

⁴ Flandreau et al. (2010) considered the foreign government debt issued over the past 200 years in London, New York and Paris by emerging economies and examined defaults on the basis of underwriter identity. They found that the role of sovereign underwriters has changed significantly, explaining what they call the ‘default puzzle’: “The identity of underwriters once provided information on the likelihood of future defaults but no longer does so” (p. 57). According to their study, in the earlier era, underwriters endorsed sovereign bond issues, often at their own financial risk, and were interested in selecting and promoting bonds that they thought would not default. In recent decades, they report, competition between underwriters and the role of rating agencies has reduced underwriter liability risk and has eliminated the link between underwriters and defaults.

‘enhanced’ debt management is compared to the conventional approach, concerning its impact on sustainability and achieving the desired overall goals.

In the official joint guidelines of the IMF and the World Bank, public debt management is defined as

“the process of establishing and executing a strategy for managing the government’s debt in order to raise the required amount of funding, achieve its risk and cost objectives, and to meet any other sovereign debt management goals the government may have set, such as developing and maintaining an efficient market for government securities. In a broader macroeconomic context for public policy, governments should seek to ensure that both the level and rate of growth in their public debt is fundamentally sustainable, and can be serviced under a wide range of circumstances while meeting cost and risk objectives. Sovereign debt managers share fiscal and monetary policy advisors’ concerns that public sector indebtedness remains on a sustainable path and that a credible strategy is in place to reduce excessive levels of debt.”⁵

Immediately after this, the IMF and World Bank report also highlights the close link of debt management with financial instability and crises:

“A government’s debt portfolio is usually the largest financial portfolio in the country. It often contains complex and risky financial structures, and can generate substantial risk to the government’s balance sheet and to the country’s financial stability.”

“Poorly structured debt in terms of maturity, currency, or interest rate composition and large and unfunded contingent liabilities have been important factors in inducing or propagating economic crises in many countries throughout history. For example, irrespective of the exchange rate regime, or whether domestic or foreign currency debt is involved, crises have often arisen because of an excessive focus by governments on possible cost savings associated with large volumes of short-term or floating rate debt. This has left government budgets seriously exposed to changing financial market conditions, including changes in the country’s creditworthiness, when this debt has to be rolled over. Foreign currency debt also poses particular risks, and excessive reliance on foreign currency debt can lead to exchange rate and/or monetary pressures if investors become reluctant to refinance the government’s foreign currency debt. By reducing the risk that the government’s own portfolio management will become a source of instability for the private sector, prudent government debt management, along with sound policies for managing contingent liabilities, can make countries less susceptible to contagion and financial risk.”⁶

For a number of reasons that shall not concern us here, the recommendations and policy responses by international organisations such as the IMF, the World Bank and the Basel Committee on Banking Supervision (BCBS) have tended to favour the increased use of mark-to-market accounting, VaR-based risk management techniques, policies to broaden and deepen sovereign bond markets, greater securitisation and the

⁵ IMF and World Bank (2003), *Guidelines for Public Debt Management*, Washington: IMF and World Bank, Amended on December 9, 2003, p. 2.

⁶ *ibid.*

use of unregulated derivatives, and reduced reliance on bank credit.⁷ Moreover, the official IMF and World Bank guidelines on public debt management include the following recommendations:

“In order to minimize cost and risk over the medium to long run, debt managers should ensure that their policies and operations are consistent with the development of an efficient government securities market” (IMF/World Bank, 2003, p. 8).

“To the extent possible, debt issuance should use market-based mechanisms, including competitive auctions and syndications” (p. 8).

“Governments and central banks should promote the development of resilient secondary markets that can function effectively under a wide range of market conditions” (p. 9).

These official IMF and World Bank guidelines encourage governments to consider only securitised debt strategies.⁸ Surprisingly, no non-securitised alternative was discussed in the report or has been debated in the literature. This contribution aims to help fill this gap.

Furthermore, despite the recognition by the IMF and World Bank of the close connection between the actions of the fiscal, debt management, monetary and financial regulatory authorities, the institutional design of public policy favoured by them over the past thirty years has increased compartmentalisation and the creation of independent agencies, at arm’s length from the government and each other: a Treasury/finance ministry, an independent central bank, a debt management office and often also one (or several) separate financial regulator(s) (such as a Financial Services Authority in the UK). In other words, the IMF and World Bank have been advising governments to de-couple public debt management from fiscal policy considerations, while fiscal policy has been de-coupled from monetary policy due to the widespread legal repositioning of central banks as independent from governments.⁹ Specifically concerning debt management, this was supposed to be ‘delegated’ to a separate agency – in some countries not staffed by civil servants, but private sector employees.¹⁰ While the interdependence of their respective actions and

⁷ IMF/World Bank (2003) says that “developed domestic debt markets can substitute for bank financing (and vice versa) when this source dries up, helping economies to weather financial shocks” (p. 3), and is backing this with comments by Alan Greenspan (Remarks by Chairman Alan Greenspan before the World Bank Group and the International Monetary Fund, Program of Seminars, Washington, D.C., September 27, 1999).

⁸ A move likely welcomed by the large securities underwriting firms who often offer lucrative employment to former IMF and World Bank staff, but also government officials and employees.

⁹ The independence of central banks from governments has increased significantly during the past three decades. In the 1990s, in no small part due to the Maastricht Treaty and IMF policies in emerging economies, “a veritable wave of independence flushed over the world of central banking” (Marcussen, 2005, p. 905). Today the central banks of most OECD countries are either legally or practically independent from government interference. On occasion, central banks have also become independent from parliaments, as is the case with the ECB. There is a sizeable literature on this topic.

¹⁰ In the words of IMF/World Bank (2003), needed policies include “a sound institutional structure and policies for reducing operational risk, including clear delegation of responsibilities and associated accountabilities among government agencies involved in debt management” (p. 5). “Where the level of financial development allows, there should be a separation of debt management and monetary policy objectives and accountabilities” (p. 6). In the UK, the Debt Management Office is an executive agency of the Treasury, although “it operates at arm's length from Ministers” (DMO, 2013). Needless to

policies was recognised, the recommendations did not include explicit coordination. The ‘sharing’ of each other’s goals was thought to be enough.¹¹ Each branch of the executive contributed to (but did not necessarily coordinate with others) monetary, fiscal and regulatory policy. Such was the design also in the UK. However, since the financial crisis it has been criticised as a flawed division of competencies, and this structure was in major parts abandoned in April 2013 with the abolition of the FSA (although the reforms have so far not included the Debt Management Office).¹²

Enhanced debt management is defined as public debt management that considers all funding options to seek cost-effective solutions, and which simultaneously takes the need for macroeconomic sustainability into consideration by re-establishing a degree of coordination between fiscal, debt management and monetary policy.¹³ Enhanced debt management is about considering the linkages between these often diverging policies and suggesting options on how to achieve common goals most effectively (such as high and sustainable non-inflationary growth with sustainable government budget and national debt conditions). This is in line with the current official thinking in the UK, which has been seeking to re-establish such coordination. It is argued that this approach offers a viable and attractive solution to the current eurozone sovereign debt crisis.

2. Comparing the Troika packages with conventional IMF programmes

The dominant conventional approach to sovereign debt crises has been for international organisations to lend more money to the affected countries, while imposing conditions, such as the well-known IMF conditionality to its lending programmes.¹⁴

The eurozone rescue packages have been authorised by the so-called ‘Troika’ of the EU, the ECB and the IMF, together with the governments of the crisis-afflicted countries. When comparing these eurozone rescue packages with the more standard IMF lending packages – such as the ones applied in the Asian crisis (1997-1999) – many similarities are found, but also one fundamental difference.

mention, when the debt management agencies are taken out of Treasuries and finance ministries and operated as limited liability companies with staff who are not civil servants, but private sector employees, as seems to be the case in some countries, such as Germany, it may be easier for interested and well-heeled parties, such as government bond underwriters, to exert undue influence. Bribing civil servants is usually a criminal offence, while this is not necessarily the case with private sector staff. Bribing the latter is, for instance, a tax-deductible expense in many countries, including Germany and Japan. Thus it may well be that the new institutional regime created new, different potential conflicts of interest and adverse incentive structures.

¹¹ “Debt managers, fiscal policy advisors, and central bankers should share an understanding of the objectives of debt management, fiscal, and monetary policies given the interdependencies between their different policy instruments” (IMF/World Bank, 2003, p. 6).

¹² However, a new, independent agency was created in 2010, the Office for Budget Responsibility, to “provide independent and authoritative analysis of the UK’s public finances” (OBR, 2010). Its remit seems less aimed at the management of the DMO than at the budgetary functions of the Treasury.

¹³ Thanks to Max von Liechtenstein for suggesting this terminology. On conventional public debt management, see, for instance, Dornbusch and Draghi (1990).

¹⁴ For a recent review of the voluminous literature on IMF conditionality, see Dreher (2009). In the case of Greece and Cyprus, there have recently also been elements of investor or bank depositor participation – an issue that is not explicitly considered here, as it does not change the relationships analytically. The latter may result in a greater effective tightening of fiscal policies by constituting a new tax on bank deposits.

Concerning similarities, both the IMF packages and the Troika programmes have attached particular conditions to their rescue loans. These have emphasised fiscal consolidation, i.e. significant cut-backs in public spending.¹⁵ The aim of improving the *budget deficit to GDP* and *national debt to GDP* ratios can indeed be pursued by tackling the numerator of these ratios. This makes sense under the *ceteris paribus* assumption that fiscal retrenchment will not reduce GDP – or at least not by more than it reduces the deficits or national debt. Other similarities in conditionality include ‘recommendations’ concerning the sell-off of national assets; the closure/merger/sell-off of particular, named banks to ‘foreign strategic partners’; the tackling of large-scale bad debts in the banking system or corporate sector by socialising private sector liabilities and burdening the tax payer; and supply-side policies in the form of structural reforms towards greater deregulation, liberalisation, privatisation and cut-backs in the role and influence of the public sector bureaucracy.

Thus the packages contain many common policies which are restrictive in nature, resulting in a reduction of domestic demand or an increase in supply, which impart deflationary pressures on the economy. However, there is an important difference: The conventional IMF loan packages have since the 1980s almost always contained a significant pro-growth element. It is this feature that is lacking in the Troika programmes in Europe.

Since the mid-1980s, IMF and World Bank packages have tended to emphasise currency devaluation as part of the macroeconomic policy mix, offering a boost to exports and thus mitigating the otherwise significant emphasis on austerity by allowing for at least one avenue of macroeconomic policy to deliver economic growth.¹⁶ The survey of studies by Haque and Kahn (1998) finds that most IMF programmes result in an improvement in the current account balance and the overall balance of payments. This IMF conditionality policy-mix, which relies on the export sector as the crucial stimulant for growth, had been developed in the 1980s specifically in response to the perceived prior anti-growth bias of earlier conditionality packages. Thus in the 1980s a ‘new orthodoxy’ developed (Sachs, 1987) of lending conditionality consisting of ‘growth-oriented adjustment programmes’ centred on “‘outward-oriented’ development strategies, designed to produce export-led growth. Increased exports from the debtor countries are seen as the key to more output, more employment, and more foreign exchange to service the foreign debts” (p. 1).¹⁷

¹⁵ This is what Jeffrey Sachs has criticised as the IMF’s emphasis on fiscal policy (“IMF stands for ‘It’s Mainly Fiscal!’”, heard by the author in one of his speeches in Bangkok in 1997).

¹⁶ A majority of IMF programmes is applied to countries that have floating exchange rates (or have recently had to abandon fixed or pegged exchange rate regimes, such as in the case of Thailand, Indonesia and Korea right until the Asian crisis). Knight and Santaella (1997) argue that IMF programme components tend to include measures to increase fiscal revenues, reduce government expenditures, tighten domestic credit, and adjust the exchange rate. Conway (1994) also finds that participation in IMF packages results in lower public investment, reduced budget deficit or increased surplus, and a real depreciation of the exchange rate.

¹⁷ Sachs describes this new IMF orthodoxy as consisting of trade liberalisation, currency depreciation and deregulation and privatisation of the economy. “This “liberalization package” is urged by the U.S. government as part of the Baker Plan, by many influential academicians, and by the IMF and World Bank...” (Sachs, 1987, p. 2).

Lee and Rhee (2002) evaluate the records of all countries that have experienced a currency crisis and joined 159 independent IMF conditionality programmes between 1973 and 1994.¹⁸ They found that within two years after the beginning of IMF programmes there is a sharp recovery, whereby “the country’s export expansion and expansionary macroeconomic policy are highly correlated with the prompt post-crisis recovery” (p. 541).¹⁹

Economic growth is important for the sustainability of public debt: tax revenues and government expenditure on social welfare tend to be functions of economic growth, and economic growth reduces therefore deficit/GDP and debt/GDP ratios by reducing the numerator and increasing the denominator simultaneously. Suitably high economic growth can be argued to be the only way of indebted countries having successfully serviced and repaid their debts, without high inflation eroding them or without default, debt forgiveness or ‘haircuts’.²⁰

The ultimate success of post-crisis policy packages hinges on their ability to stimulate demand (as opposed to imposing restrictive fiscal and monetary policy and potentially deflationary supply-side reforms).²¹ In other words, the currency depreciation aspect of IMF packages may constitute a more important aspect than is commonly recognised in achieving overall success. It is precisely this redeeming, pro-growth feature of IMF packages that is missing in the Troika packages for the crisis-affected eurozone economies. As a result, the drawbacks of the conventional approach to the resolution of the European sovereign debt crisis may dominate.

¹⁸ Using data from the IMF Annual Reports, they identify a total gross number of programmes of 455, consisting of 345 stand-by arrangements, 42 extended fund facility (EFF) arrangements, 44 arrangements under the structural adjustment facility (SAF) or the enhanced structural adjustment facility (ESAF) and 21 combined programmes of two or more such facilities. They reach the net number of programmes by subtracting double-counting and prior ongoing programmes before crisis-related programmes were entered.

¹⁹ However, the recovery does not take GDP back to its pre-crisis levels, while employment growth remains sluggish throughout, leaving unemployment at a higher level “for a long period after the crisis, even if output growth, inflation rates, etc. are restored to their pre-crisis level” (p. 541).

²⁰ For the relationship between debt, interest and growth, see Tim Congdon’s (1988) classic account.

²¹ This is recognised by most investors. For instance, Andreas Utermann, chief investment officer of RCM, the equity fund manager owned by Allianz, was quoted on the UK cover page of the *Financial Times* upon the announcement of the July 2011 Greek rescue package: “The trouble with all this is that the crisis will only be on its way to full resolution when it becomes clear the eurozone, and in particular the periphery have achieved satisfactory growth rates” (*Financial Times*, Euro rescue deal fails to dispel fears, 23 July 2011). See also the CEO of PIMCO, Mohammed El Erian, on the revised Cyprus rescue: “These challenges are significant, and they will not be overcome easily and immediately. Yet, as large as they are, they pale in comparison to the big elephant in the room: the rescue contains very little to enhance Cyprus’s ability to grow and create jobs.” (Cyprus: Better Designed Rescue, Challenging Implementation, *Huffington Post*, 25 March 2013) and the EU Commission’s Olli Rehn on Cyprus: “There is plenty of uncertainty about the exact trajectory of economic growth in Cyprus—it will depend on many things, starting with the effective implementation of all the program—and relating to the stabilization of the financial system, and the overall national economy. ... So at this stage we do our best, and have done it as thoroughly as we can” (*Denver Post*, EU to extend loan repayments for Ireland and Portugal, 12 April 2013). The literature is not in agreement about the total impact of IMF programmes on growth. This is due to different methodologies and samples. Studies that found significant declines in output growth due to the participation in IMF programs include Przeworski and Vreeland (2000), while those with significantly positive output effects include Dicks-Mireaux et al. (2000). Hutchison’s (2003) careful methodology yielded a significant decline in output, but this is followed by a significant rebound. Hutchison finds that domestic credit growth, which is commonly restricted as part of the conditionality, also falls significantly under IMF programmes.

Concerning alternatives, depreciation would be such a possibility – as it has been in the majority of standard IMF post-crisis loan packages. However, this paper is not concerned with options that are currently without broad political support, and that includes an exit from the eurozone (and hence depreciation), default or the introduction of eurobonds.²² Instead, an option is needed that would avoid default, maintain the single currency, not rely on European-level socialised risk or fiscal transfers (‘transfer union’), while at the same time not suffering from the drawbacks of the current (conventional) approach. The features of such an alternative need to be specified, and it needs to be explored whether such an alternative can be developed.

3. Problems of the conventional approach

We have identified a number of problems with the conventional approach under the particular set of circumstances proscribed in the eurozone:

- (a) Conventional responses to banking, sovereign debt or balance of payments crises which are centred on large loans from external lenders do not reduce the total debt burden of the affected country but increase total debt. This can be called the ‘loan shark’s solution’, whereby indebted borrowers are approached by loan sharks offering them a loan to be able to service all their other debts, but thereby increasing their total debt and rendering their total (though not necessarily immediate) interest burden even heavier. Specifically, total debt increases, as the lending countries need to increase their indebtedness as well; and external debt increases, which has been recognised as a factor rendering debt problems less, not more sustainable. (FN citation xxx).
- (b) The conditionality focuses on fiscal retrenchment, which in the case of the eurozone’s Troika rescue packages does not include an explicit growth policy (as currency depreciation is excluded and no alternative growth policy is added to the policy mix).
- (c) The problems of non-performing assets in the banking sectors of the affected eurozone countries have not yet been fully resolved; as economic growth contracts or stagnation becomes prolonged, more bank assets become non-performing, as the recession affects also previously viable loans.²³ This could result in a significant further increase in sovereign liabilities, exacerbating the sovereign debt crisis and in turn further undermining banking systems, as capital flight to core eurozone countries increases.²⁴
- (d) The continued stagnation means that fiscal deficit/GDP and national debt/GDP ratios will not improve, despite radical fiscal tightening. As a result, the EU has now recognised the need for second bailouts in a number of affected countries, which further increases their debt burden and renders the situation

²² Eurobonds are being criticised for further socialising costs across Europe and creating adverse incentive problems, in addition to the absence of a unified fiscal policy or European finance ministry.

²³ This is an effect recognised in the first decade of the long period of Japanese economic underperformance. See, for instance, Werner (1997b), who argued that the epithet of ‘zombie firms’ was somewhat unfair: the major downturn, long recession and emerging deflation was not for wimps. However, the longer a period of nominal GDP contraction continued, by definition the more firms had to go bankrupt (and the more of banks’ loans had to become non-performing), since firms face the asymmetric nominal accounting constraint of not being able to report losses indefinitely.

²⁴ This is the counter-part to the large and growing so-called TARGET II balances at the Bundesbank, effectively the internal capital balance in the eurozone monetary system.

even less sustainable.²⁵ This tends to result in further downgrades of the sovereign credit rating of the affected countries, which in turn has negative repercussions for the banking sector, since banks are major owners of the national government bonds which must be marked to market.

- (e) The Troika rescues are funded largely by core eurozone countries, especially Germany. Thus a degree of socialisation of risk and the liabilities of affected countries is taking place, which creates adverse incentives and also increases the indebtedness of the less indebted eurozone members, while increasing total debt (as noted in point (a) above).

The above problems and causal links render the overall problems larger, not smaller. Hence the current policies are unsustainable. The necessary solution that avoids euro exit and debt default must address the two core issues, namely the need to generate economic growth (without which both the state of government finances and the banking sector must further deteriorate) and the need to cut through the Gordian knot of the negative feedback between banking sector stability and sovereign credit rating, whereby one exacerbates the other.

One alternative has been proposed by the ECB, which potentially could meet these requirements: The president of the ECB, Dr Mario Draghi, announced on 6 September 2012 that the ECB would engage in ‘outright monetary transactions’ (OMT), acting effectively as the lender of last resort also to governments, in return for acceptance of Troika conditionality and loss of fiscal control to the ESM.²⁶ However, there are also problems with this approach: Firstly, its legality is in dispute, since it is likely at least to breach the spirit of the no-bailout clause, if not its letter.²⁷ Secondly, similarly to eurobonds, risk would be socialised at the European level, thus creating moral hazard. Thirdly, there is the possibility that new macroeconomic costs will be borne by other members of the eurozone when outright monetary transactions, due to their expansion of the money supply, have negative consequences, such as inflation, asset inflation or other transfers. To cause inflation is also recognised as a common policy by highly indebted governments to reduce the real debt burden. This creates the possibility of further erosion in policy credibility. Fourthly, it is not clear that this solution will be able to tackle the fundamental problem of lack of growth in the affected eurozone periphery: there is no empirical evidence that ECB open market purchases are associated with greater economic growth in the affected countries. To the contrary, in the UK case, such ‘quantitative easing’ has been shown to have a negative coefficient when regressed on nominal GDP growth (Lyonnet and Werner, 2012).

²⁵ See, for instance, the news that Portugal may require a second bail-out (Lisbon struggles to avoid second bailout, *Financial Times*, 11 April 2013), and that the Cypriot bail-out has risen from E17.5bn to an estimated E23bn within a month: Bruno Waterfield, Cyprus’s E23bn bail-out now bigger than its economy. *The Daily Telegraph*, 12 April 2013. Meanwhile, the conditionality was relaxed in April 2013 in the case of Portugal and Ireland. Greece has required several bailouts and relaxations of the original bail-out terms since 2009.

²⁶ Introductory statement to the press conference (with Q&A), Mario Draghi, President of the ECB, Vítor Constâncio, Vice-President of the ECB, Frankfurt am Main, 6 September 2012, accessed at <http://www.ecb.int/press/pressconf/2012/html/is120906.en.html>

²⁷ See, for instance, publications by the EU constitutional law and central bank law expert at Goethe University, Frankfurt, Helmut Siekmann, such as in Siekmann (2011, 2012). Also Siekmann and Werner (2011).

4. A better option: Enhanced debt management

The crisis started in the sovereign bond markets. When the crisis flared up in Greece in late 2009, yields on outstanding government bonds began to rise, reaching 61% in July 2011 for 5-year government bonds, and 35% in January 2012 for 10-year bonds. The pattern was similar in Ireland, Portugal and Cyprus, with, for instance, Portuguese 5-year government bond yields reaching 18% in December 2011. Even Spanish and Italian bond yields were significantly elevated at the height of the crisis, with Italian ten year benchmark government bond yields approaching 7% in December 2011 and January 2012 and similarly so for Spain in July 2012.

These rising bond yields are problematic, because if newly issued debt requires similarly high issuance yields, servicing the national debt becomes more burdensome, exacerbating the deficit and debt problems and sowing further doubts on the sustainability of the debt. The problem is that speculators may therefore create a situation whereby their collective action of shorting the government bonds of a high-debt country, by raising yields, becomes self-fulfilling, since this action makes the debt more unsustainable and creates incentives for other investors to sell off their bond holdings, further exacerbating the problem. It is known that a large proportion of investors follow ‘momentum’, act as a herd and thus can create self-fulfilling outcomes, a vicious cycle in this case.²⁸

So a core problem is a funding problem – which is why the conventional solution has been to offer external funding from the Troika. The first question should thus be whether all funding options have been considered and exhausted. The government can fund the public sector borrowing requirement by issuing plain vanilla bonds, bonds with complex and variable interest, indexed bonds, bonds with restrictive covenants and optionality, and synthetic constructions of state contingent debt (by managing the maturity structure of non-contingent debt).²⁹ A large number of derivatives may be created to facility the construction of an optimal debt structure and the management of outstanding debt. All of these options have in common that they refer to securities or otherwise tradable instruments – in line with the IMF/World Bank manual on public debt management. However, part of the problem, identified above, is the very nature of such tradable instruments: they are subject to speculative attacks, and all corporate owners, in line with GAAP or IFRS accounting standards, have to mark their holdings of such instruments to market. This gives significant leverage to speculators: especially when the ‘free float’ of actually traded securities, for instance a particular type of government bond, is small, and the majority are in the hands of stable, long-term investors (such as pension funds, insurance companies or, indeed, certain types of banks). Then it is not impossible for speculators to ‘corner’ the market for traded securities, drive down their prices and by thus forcing even the long-term holders of such securities to mark them to market, accounting losses are inflicted on a potentially far larger group of investors – including banks.³⁰ This accelerates the cascading effect

²⁸ Empirical evidence for the dominance of momentum trading and herding behaviour is provided by Grinblatt et al. (1995) and Schiller and Pound (1989). Theories of herding include Banerjee (1992), Brennan (1990), Froot et al. (1992) and Hirshleifer et al. (1994).

²⁹ For examples of this large literature see for instance, Buera and Nicolini (2004). See also Barro (1997), Bohn (1988, 1990) and Calvo and Guidotti (1990).

³⁰ On market manipulation and the free float, see for instance, Allen et al. (2006), Järvinen and Käppi (2004).

of rising sovereign bond yields and their joint negative impact on banks in the country and the fiscal condition – all of which in turn creates reasons for bond prices to fall further.

Since the tradability of the debt instruments and the requirement by holders to mark them to market is an important propagation mechanism for the crisis, which is exacerbated by the effect of ratings downgrades on debt instruments, a solution would be for governments to issue non-tradable debt which, according to GAAP, does not have to be marked to market and is not rated by the rating agencies. This would unravel the Gordian knot of the contagion between the state of banks and public finance.

Based on our analysis, it is possible to specify the features of an alternative, ideal funding source. One can then examine whether it might be possible to design the appropriate instrument that meets those criteria – possibly using the advanced financial engineering skills of leading experts in debt origination.

If the non-tradable debt instrument could also raise the borrowed funds at a lower cost than that required in the bond markets, the proposition would be highly compelling for the finance ministry or debt management office. Better still if this debt instrument could at the same time solve the problem of shrinking domestic demand and lack of growth stimulus, by somehow acting to boost domestic demand, solving this core problem of eurozone rescues. But if on top this non-tradable debt instrument could also be issued entirely domestically, by borrowing from domestic investors and not foreign investors, a further propagation mechanism of the crisis could be eliminated (foreign, especially short-term, liabilities have been recognised in the literature as being a key factor in triggering sovereign debt and balance of payments crises).³¹ In addition, this would be an attractive feature because it would not socialise the debt problem across the eurozone, would not require any ‘transfer union’ features and would not create adverse incentives, such as moral hazard. It would also mean that the aggregate total debt would be smaller, since the institutions or countries acting as lenders in the conventional rescue packages would then not also have to get indebted in order to lend these funds. If, finally, this non-tradable form of government borrowing would also provide a boon to the domestic banks, offering increased revenues that they can use to organically build up reserves and larger capital buffers, then the last of the problem features of the conventional approaches could also be addressed.

To summarise, an ideal alternative funding source would:

- (a) be non-tradable and would not need to be marked to market by investors, but instead could be kept on their books at face value;
- (b) be cheaper, requiring a lower interest rate, than the bond market yields;
- (c) be available without rating from the credit rating agencies and hence would also not be affected by potential ratings downgrades;
- (d) be available domestically, hence not requiring borrowing from abroad, thus resulting in lower total debt and greater fiscal and financial stability domestically and in the eurozone;

³¹ See, for instance, Rodrik and Velasco (2000). See also the argument by Gros (this volume).

- (e) generate returns for the domestic banking sector, allowing organic growth of reserves and capital buffers;
- (f) act to boost domestic demand, delivering overall economic growth, and hence lower deficit/GDP and debt/GDP ratios by increasing the denominator;
- (g) be available without the conditionality of required deep fiscal tightening, asset sell-offs and deflationary structural reform;

Given how utopian the wish-list may already appear, one might as well add another, even taller-sounding feature, which would be the most attractive of all: The ideal alternative funding source would also

- (h) be available on demand by being created out of nothing, without the need for any capital by the lenders.

Should such a debt instrument or funding source exist, it would be the most attractive source for the sovereigns concerned, and not utilising it would constitute a major sin of omission. To find such a debt instrument, one could ask the debt origination experts at a leading international bond investment bank whether it could be designed. The answer would arrive swiftly, and though not necessarily in polite language, would be to the effect that this wish list of features is impossible to meet.

Securities firms could hardly expect to earn much money on such an instrument. But, fortunately, they will not be needed to design such an instrument: It already exists. Indeed, it is one of the oldest and simplest debt products in existence: *a bank loan contract*.

Enhanced debt management refers to the concept of the state as borrower acting as a fiduciary tasked to consider all possibilities of raising funds in all markets, using the full range of possible fund raising tools and techniques, even ‘unconventional’ ones. However, past approaches to debt management have often focused on a narrow set of funding tools and debt restructuring. When exactly the simplest and most plain-vanilla of debt instruments, the bank loan contract, became *persona non-grata* and its use effectively ‘unconventional’, is an interesting question for future research.

Enhanced debt management suggests that governments of crisis-affected countries should immediately halt the issuance of new government bonds and also the borrowing from the Troika, and instead raise the public sector borrowing requirement by entering into loan contracts from the banks in their country. Since aggregate private debt is much larger than government debt, and banks are the single biggest providers of the former, they are also able to provide for all the funding needs of the government. Banks used to be involved in direct lending to governments, but as the IMF/World Bank manual underlines, this has been actively discouraged for the past twenty years or so.³²

Below is an explanation of why bank loan contracts meet the above wish-list (and have a number of further advantages to boot).

- (a) Bank loan contracts are non-tradable and banks are not required to mark their loan contracts to market – there is no market. Thus they are kept on the banks’

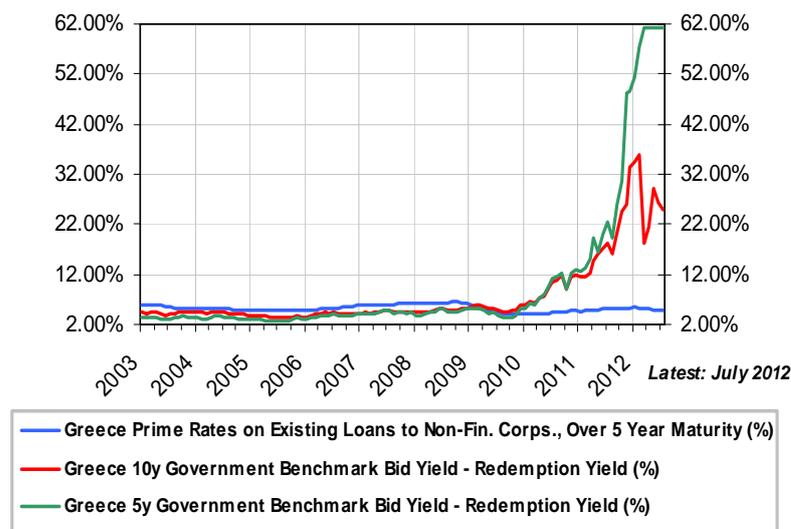
³² Concerning government borrowing from foreign banks, this was fairly common for emerging markets in the past. Kim Oosterlinck (this volume) reminds us that the Brady plan of 1989 switched bank lending to emerging market sovereign borrowers into tradable securities.

books at the initial face value until the loan matures. There is no fluctuation in the value of the loan throughout its life. Speculative attacks on the debt are impossible.

- (b) Throughout the crisis, untraded bank loan funding has been significantly cheaper than traded bond finance for governments. For this reason alone it is surprising that finance ministries and debt management offices have not switched from bond issuance to borrowing from banks via loan contracts. Figures 1 to 5 show the benchmark bond yields (5-year and 10-year government bonds) and the prime rate for bank loans (usually for maturities of 5 years and longer) in Greece, Ireland, Portugal, Italy and Spain (GIPIS).³³ As can be seen, the interest margin between government bond yields and the prime borrowing rate not rarely reaches *several hundred basis points*, on occasion even several thousand. For Italy in 2012, the cost savings due to lower interest could have reached E9.75 bn.³⁴

Figure 1: Greece

Prime Rate vs. Market Yield of Benchmark Bonds: Greece



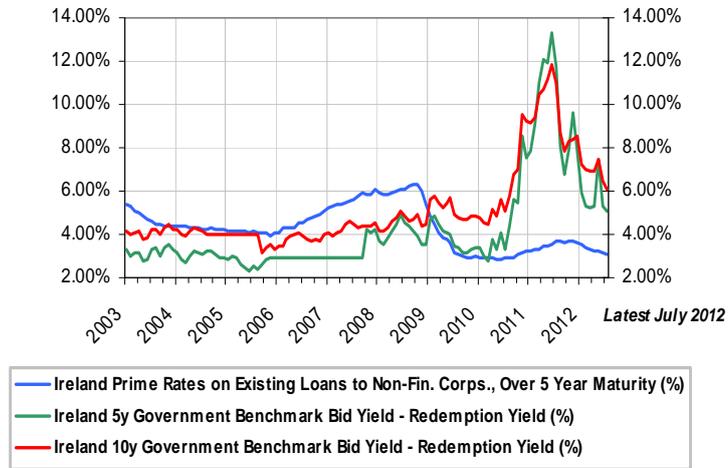
Source: Thomson Reuters Datastream, ECB

³³ This sequence, and hence the acronym, created by the chronology of breaking through or approaching 7% with their benchmark bond yields.

³⁴ This example is based on the 2012 bond issuance of E 260bn, the 10-year benchmark yield at the beginning of 2012 and the prime borrowing rate for maturities of 5 years or later.

Figure 2: Ireland

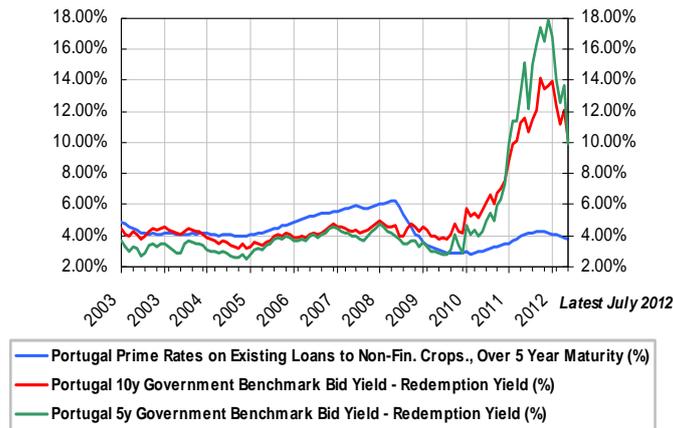
Prime Rate vs. Market Yield of Benchmark Bonds: Ireland



Source: Thomson Reuters Datastream, ECB

Figure 3: Portugal

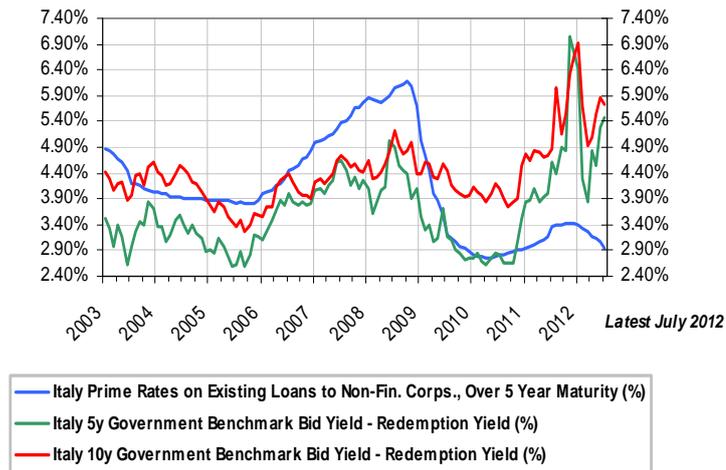
Prime Rate vs. Market Yield of Benchmark Bonds: Portugal



Source: Thomson Reuters Datastream, ECB

Figure 4: Italy

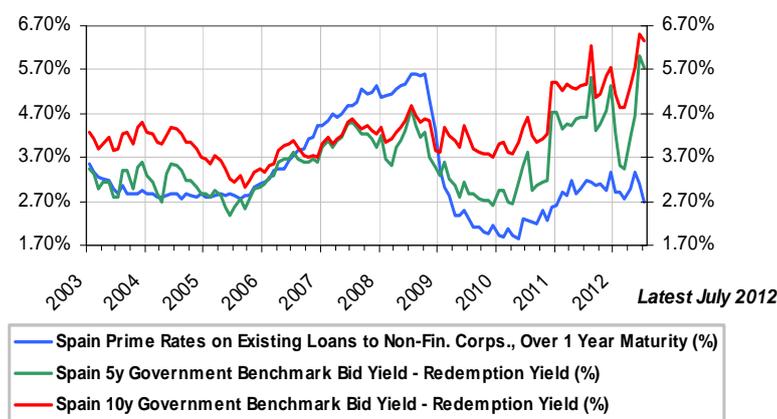
Prime Rate vs. Market Yield of Benchmark Bonds: Italy



Source: Thomson Reuters Datastream, ECB

Figure 5: Spain

Prime Rate vs. Market Yield of Benchmark Bonds: Spain



Source: Thomson Reuters Datastream, ECB

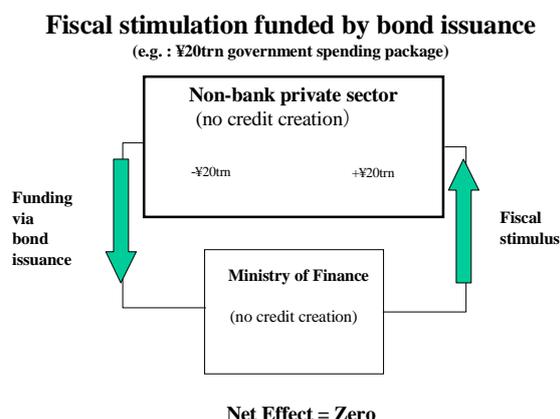
- (c) There is no need for governments to pay for sovereign credit ratings, since no such ratings are required for non-traded bank loans. Likewise, rating downgrades would have no effect on banks' balance sheets or the government's ability to borrow from banks. For banks, the government remains the best customer, thus commanding the best interest rate (the prime rate; theoretically even a lower rate than the prime rate can be justified, since governments issue the banking license to banks, and are considered the lender of last resort to banks, such as in Ireland or numerous other national bank bailouts, something that cannot be said for top corporate customers).
- (d) Bank loans are available domestically, hence deliver a more stable debt structure that is not dependent on borrowing from abroad. This results in lower total debt and greater fiscal and financial stability for all parties concerned in the eurozone.
- (e) The main business of banks remains the extension of credit. When banks need to generate returns so that they can put aside more money as reserves or capital buffers, as is currently the case in the eurozone, the healthiest method is to allow them to earn these through growth, i.e. an expansion of their lending business. By lending to the government, bank lending would rise significantly during a short time period. Even outstanding bonds could be redeemed and switched to bank finance this way.
- (f) Bank credit creation for transactions that are part of GDP has been identified as the main determinant of nominal GDP growth.³⁵ This is a problem for the eurozone at the moment, since bank credit has been *contracting* by 6.6 % YoY in Greece (December 2012), 13.2% in Ireland (January 2013), 2.6% in Portugal (January 2013), 0.8% in Italy (January 2013) and 6.4% in Spain (December 2012, all data from the respective NCBs). According to the ECB, the weak bank credit data is the main reason for the uninspiring growth

³⁵ See, for instance, Werner (1992, 1997, 2005, 2012) and Lyonnet and Werner (2012), who present empirical evidence that GDP growth is linked to and unidirectionally Granger-caused by bank credit growth in Japan and the UK. The ECB seems to endorse this 'quantity theory of credit' view now (see President Draghi's press statement of 6 September 2012).

outlook in the eurozone.³⁶ By borrowing from banks, governments can pump-prime bank credit creation, ending the current bank credit destruction (negative bank credit growth). Thus when governments borrow from banks, they can expect the resulting sharp upturn in bank credit creation to boost nominal GDP growth and hence domestic demand, resulting in greater employment, lower expenditure on unemployment benefits, greater tax revenues and hence lower deficits and a slowdown in the debt build-up, and also larger GDP, thus lowering the deficit/GDP and debt/GDP ratios by lowering the numerator and increasing the denominator simultaneously;

Figure 6 shows the impact of non-monetised fiscal policy on the amount of money circulating in the economy: as the government borrows from the non-bank private sector to fund government expenditure, there is no increase in the amount of money circulating in the economy. Since the latter has been shown to determine nominal GDP growth (Werner, 1997, 2005), such fiscal policy cannot address the problem of weak economic growth.

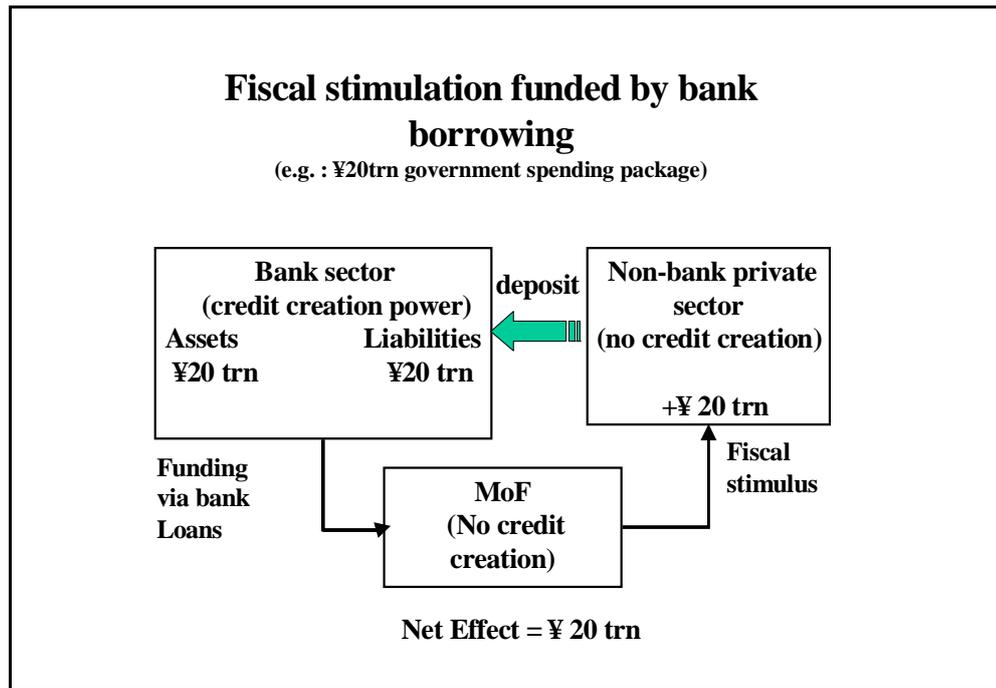
Figure 6



³⁶ In his press statement of 6 September 2012, President Draghi first explained the downward revision of growth forecasts by Eurosystem macroeconomics staff, followed by the ECB’s monetary analysis: “Turning to the **monetary analysis**, the underlying pace of monetary expansion remained subdued. The annual growth rate of M3 increased to 3.8% in July 2012, up from 3.2% in June. The rise in M3 growth was mainly attributable to a higher preference for liquidity, as reflected in the further increase in the annual growth rate of the narrow monetary aggregate M1 to 4.5% in July, from 3.5% in June. The annual growth rate of loans to the private sector (adjusted for loan sales and securitisation) remained weak at 0.5% in July (after 0.3% in June). Annual growth in MFI loans to both non-financial corporations and households remained subdued, at -0.2% and 1.1% respectively (both adjusted for loan sales and securitisation). To a large extent, subdued loan growth reflects a weak outlook for GDP, heightened risk aversion and the ongoing adjustment in the balance sheets of households and enterprises, all of which weigh on credit demand. Furthermore, in a number of euro area countries, the segmentation of financial markets and capital constraints for banks continue to weigh on credit supply. Looking ahead, it is essential for banks to continue to strengthen their resilience where this is needed. The soundness of banks’ balance sheets will be a key factor in facilitating both an appropriate provision of credit to the economy and the normalisation of all funding channels“ (op. cit.). Both the downward revision of the growth forecast and the assessment that “the underlying pace of monetary expansion remained subdued” could not have been based on the traditional monetary aggregates, since these showed an acceleration, not slow-down. Instead, they seem to be based on the bank credit aggregates and the outlook for the state of health of the banking system. This suggests an underlying macroeconomic model similar to Werner (1997).

Figure 7 illustrates the situation when, at given government expenditure, this is funded by borrowing from banks via loan contracts. This increases bank credit creation for GDP transactions and hence the money supply. Nominal GDP is boosted. Thus merely switching the funding method from traded securities to untraded bank loan contracts can have a markedly different macroeconomic impact (see also Werner, 2012).

Figure 7



- (g) The bank loans are available from domestic banks without the need to request assistance from the Troika. Therefore there would not be any conditionality, such as drastic cuts in welfare or education budgets etc. While it may still be prudent to reduce government expenditure to a minimum, any expenditure on productive activities, such as transport and communications infrastructure, education, R&D and health, can be considered helpful for growth. Further, no structural reform would be required – which is a supply-side problem (and hence not directly able to address the problem of lack of demand);
- (h) The banks would be allowed to create the required funds out of nothing by crediting the government’s accounts with them, effectively inventing the money (as is usual banking practice; see Werner, 2005; Ryan-Collins et al., 2012). According to the Basel capital adequacy regulations, no capital is required for bank lending to the sovereign borrower (the risk-weight is zero). Thus the question where banks would obtain the necessary funds from would not arise: they would create them without needing to raise capital. This is, of course, the reason why credit creation for GDP transactions is the key determinant of nominal GDP growth: growth requires increased transactions, which means that more money must change hands to pay for them. In our monetary system, about 97% of the money supply is created by banks through

credit creation. Thus bank credit creation (for GDP transactions) must increase for GDP growth to be possible. Bank lending to the government fulfils this criterion.

- (i) In addition to the above attractive features, the government would save the bond issuance fee, which may be small (0.4% or so) in times of stability, but rises substantially (to up to 2%) in times of financial instability and a sovereign debt crisis (for emerging markets, Nieto-Parra, 2009). Even 1% on E100bn new bonds issued – an underestimate of Italian annual bond issuance – would be a non-negligible sum for countries with substantial fiscal deficits and national debt.
- (j) Finally, banks are able to utilise these non-tradable loans as collateral with the ECB to refinance themselves, should this be necessary. The ECB announced on 8 December 2011 that it would in principle accept loan contracts as eligible collateral.³⁷ The caveat ‘in principle’ does not pose a problem, since the counterparty is the sovereign, rendering the loan contracts prime assets that the ECB will treat equivalently to government bonds. (The ECB and the NCBs have themselves purchased substantial amounts of government bonds of the crisis-affected nations – a measure that does not increase bank credit creation.)

5. Concluding Remarks

Enhanced debt management that includes the option of using untraded debt would likely be able to end the current eurozone sovereign debt crisis. While such debt, in the form of bank loan contracts, is highly traditional, the institutional and debt management policy changes of the past twenty years or so have rendered it ‘unconventional’ today.

The proposed measure is in many ways similar to the long-term refinancing operation (LTRO) announced by the ECB on 8 December 2011. This effectively allowed banks to switch from securitised, traded funding instruments to OTC (over-the-counter) funding via direct loans from the ECB. Over E1trn in such 3-year loans at very favourable conditions were granted by the ECB as part of this programme. With this measure the ECB took the step of allowing banks to swap tradable securities for non-tradable loan contracts – with the ECB as counterparty. This reflects the recognition by the ECB that tradable securities are not always the most attractive or suitable form of funding and instead non-tradable debt in the form of direct loan contracts must be considered. Although the LTRO has ensured high bank liquidity, the funds have largely accumulated as unused excess reserves of the banks held at the ECB, and have not contributed to credit creation and hence monetary and GDP growth. The proposed measure would change this and constitutes a needed counterpart to the LTRO.

According to the IMF/World Bank (2003) manual on public debt management,

“The main objective of public debt management is to ensure that the government’s financing needs and its payment obligations are met at the

³⁷ See the press release by the ECB on 8 December 2011, accessed at http://www.ecb.int/press/pr/date/2011/html/pr111208_1.en.html. See also the relevant commentary in the ECB’s December 2011 Monthly Bulletin, available at <http://www.ecb.int/pub/pdf/mobu/mb201112en.pdf>

lowest possible cost over the medium to long run, consistent with a prudent degree of risk” (p. 9).

Given this main objective, it is difficult to see how the finance ministries and debt management offices, as well as the Troika have overlooked the fact that far cheaper public debt financing has been available for many of the crisis-affected countries than in the securitised bond markets. In the bank credit market, the government would be eligible to borrow at the ‘prime rate’. In many crisis-affected countries for most of the crisis periods this interest rate has remained drastically below the government bond market interest rates, which had been driven up at least partly by the bond speculators betting against such government debt.

Enhanced debt management that exits securitised debt markets and relies on bank credit from the commercial banks is likely to trigger an economic recovery. This would increase tax revenues. The negative spiral would quickly be turned into a positive one. The humble switch in the funding technique of the public sector borrowing requirement – a debt management policy – turns out to be a potentially powerful tool to solve a major international financial conundrum, by offering a stable pro-growth stimulation policy that however does not cost any extra money.

There is also an historical precedent for this type of policy: the economics is the same as that of the system of short-term bills of trade issued by semi-public entities in the years from 1933 onwards in Germany, which were bought by the German banks, hence increasing bank credit creation. These are known as ‘Mefo Wechsel’, after one of the issuers, the Metallurgical Research Corporation. This method was introduced by Dr. Hjalmar Schacht, President of the Reichsbank, the German central bank, in 1933.³⁸ The method, which was called ‘silent funding’, was highly successful.³⁹

In the 1930s the bills of trade were a preferable method (instead of direct loan contracts with banks), since banks did not have to mark securities to market, and credit rating agencies did not exist. The method suggested here, of direct loans by banks to governments, is a modern version more suitable to today’s regulatory and financial market environment.⁴⁰ The effect of stimulating a recovery will be the same.

In an assessment of this alternative policy of enhanced debt management, there should be mentioning of the limitations of this approach. While the proposed measure is surprisingly attractive, it cannot solve all problems on its own. What remains is the question of how to deal with unsound banking systems that require significant recapitalisations within a very short period of time – of an extent so large that organic revenue growth offered by enhanced debt management is not likely to be sufficient.

³⁸ For further details, see Werner (2003).

³⁹ Werner (2003) argues that the rapid German economic recovery from over 20% unemployment in early 1933 to virtually full employment by the end of 1936 was the result of the ensuing expansion in bank credit creation, caused by the funding of fiscal policy through credit creation, not fiscal stimulus per se. Japan’s experience of the 1990s has shown how even far larger fiscal expansions will not boost the economy at all if they are not funded by credit creation (see Werner, 2005, 2012a).

⁴⁰ The author first proposed it in 1994 in Japan. See also Werner (1998, 2000, 2003). It has since been endorsed by Andrew Smithers, Tim Congdon and Martin Wolf, as well as by an FT editorial (Martin Wolf, The risky task of relaunching Japan, *Financial Times*, 6 March 2013; Leader: Japan’s monetary upheaval arrives, *Financial Times*, 3 March 2013).

For this contingency, a second, related though separate measure can be adopted. This is not the main focus of this paper, and is treated in greater detail separately, but it shall be mentioned briefly:

Banking crises are always the result of non-performing assets in the banking system. As mentioned at the outset, since banks only have about 10% or less of capital to back their loan and securities books, only a 10% decline in the valuations of their assets will render them bankrupt. This is of course another reason why it is important for banks to ensure that a large proportion of their assets are loan contracts that are not tradable, and hence do not have to be marked to market. This is why securitisation of loans tends to increase instability in the financial system: securitised loans need to be marked to market, are subject to the influence of credit rating agencies and can be targets of speculative attacks.

When this scenario comes true (for instance, because the value of the banks' securitised asset portfolio falls by enough to amount to a drop in total asset values of 10%) and banks are insolvent, an immediate crisis measure is needed. What features would an ideal policy response to such a banking crisis have? The following list can be identified:

- (a) It would eliminate the non-performing assets from the banks' balance sheets.
- (b) The banks would obtain the original face value of the non-performing assets in cash, thus rendering their balance sheets solid and highly liquid. There would no longer be a banking crisis or instability in the banking system.
- (c) It would achieve this at zero new costs for the tax payer.
- (d) There would not be any further repercussions, national debt or interest payments as a result of this removal of the non-performing assets from the banks' balance sheets.
- (e) The method should not increase the amount of money in circulation in the economy, as this could potentially result in inflationary pressures and an inflation cost to tax payers and the economy.
- (f) To avoid moral hazard, banks would in exchange for this bail-out be required to follow general rules concerning the extension of credit, in order to avoid future banking crises.⁴¹

Again, we find that this ideal policy measure already exists – and it has in the past been used successfully for this purpose: instead of the government using tax money to bail out banks, the central bank can purchase the non-performing assets via a subsidiary from the banks at face value. The ownership of the untraded subsidiary does not have to be marked to market by the central bank. There is no cost to the tax payer. This method has been used by the Bank of England in 1914, the Bank of Japan in 1945 and the Federal Reserve in 2008. It is puzzling, why the Bank of England did not use this method in 2007-2009, why the ECB has so far not employed it, and why the Irish central bank was not asked to undertake this task – and instead decision-makers chose to use tax money, thereby massively increasing debt and future compound interest liabilities – making the job of debt management all the harder.

⁴¹ These rules would require banks not to extend credit for transactions that do not contribute to GDP (and hence are capital-gains oriented asset transactions that tend to fuel asset boom-bust cycles and cause instability in the financial system).

Could the answer be that a fear of inflation has cautioned central banks against this measure? Central banks have, as part of their QE programmes, purchased significant amounts of securities and private sector assets – often, as in the UK, not from the banking sector. Such purchases may indeed be linked to inflationary pressure. However, concerning the purchase of non-performing assets by the central bank from banks, such a fear is unfounded: This method constitutes an accounting transaction within the banking system (consisting of the banks and the central bank), without the injection of new funds from the banking system into the non-banking sector of the economy. This would explain why the trebling of the Fed balance sheet in late 2008 did not result in a significant weakening of the US dollar: no money was injected into markets due to this banking sector accounting mop-up operation. It did, however, have the desired result of strengthening banks' balance sheets enough to produce more than 5% bank credit growth in 2012 and a significant recovery – while in the UK, where the Bank of England did not undertake such a policy, bank credit contracted by more than 2% and the economy experienced a double-dip. Such 'enhanced bank rescues' by the central bank, as opposed to the tax payer, also produced a swift recovery in bank credit growth in the UK in 1914 and in Japan in 1946, delivering significant nominal GDP growth.

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