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On some recent proposals of public debt restructuring in the Eurozone

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Abstract:

This paper considers the issue of sovereign debts in the Eurozone. The reasons for the reduction of public debt, which are quite strong in the present circumstances of slow growth, are briefly discussed with reference to EMU countries. Then the different possible strategies to reduce the public debt/GDP ratio while avoiding any form of debt restructuring are considered. The choice to cut public debt by means of a violent and unexpected upsurge of inflation, which in the past has often been the preferred solution, is not viable today in the Union. On the other side, alternative option for reducing the public debt by means of extraordinary finance instruments, such as wealth taxes, privatization of public companies and sale of public assets can assure only limited results. Thus the policy presently adopted in the EU, relying on the progressive accumulation of surpluses in the general government's primary budget (the *austerity solution*), seems to be the only practicable exit. However the alternative of restructuring has been investigated with growing attention in the last few years. Two distinct perspectives have been followed. On one side a number of proposals deal with the issue of existing (legacy) debt. On the other one, several projects have been presented aimed to establish a permanent insolvency mechanism for sovereigns. The former group of projects wants to avoid the private sector involvement and are based on complex mechanism of securitization of future revenue of member states (seigniorage and taxes). There are reasons to doubt that they are something substantially different from the policies currently followed and, especially, that can be more favourable to growth. The latter group of proposals, concerning the institution of an ordered procedure of insolvency for sovereigns, are meant to make effective the no bail out principle, whose compliance has proved very difficult so far. The question is raised if this perspective is really realisable in the absence of any element of fiscal union.

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1. How we got here

This note has the limited purpose of introducing a discussion on some recent proposals for restructuring the sovereign debts in the euro-zone (EZ).

It may be worthwhile recalling the reasons why the issue of sovereign debts' reduction has become central, although public debts were not among the causes of the disruptive economic and financial crisis, which has been long lasting and can not yet be considered completely over.

Actually the fast, large and disordered growth of leverage in the private sector is unanimously considered at the origin of the US financial crisis in 2007. A number of factors contributed, to different extent and in different times: a lax monetary policy, which fuelled the exuberance of the markets; the changing orientation of the banking activity from "originate to hold" to "originate to distribute", also favoured by financial innovation directed to a widespread diffusion of risks in a very complex and opaque fashion; the lack of adequate information on the quality of the different assets and on the actual final distribution of the associated risks; an often uninformed and complaisant behaviour of regulators, supervisors and rating agencies; the uncontrolled expansion of banking and financial systems.[1]

The initial underestimation of the severity of the crisis by influential observers, the hesitations and indecision on the part of the authorities responsible for economic policy, the liquidity shortages, the collapse in the value of assets and the break down of the credit circuit have contributed to the rapid and tumultuous international spread of the financial and banking crisis and to its heavy extension to real economies.

In the EZ, governments' measures directed to tackle the crisis have resulted in a quick and large deterioration of the public finances, even in the most virtuous member countries. Between 2007 and 2010, in Ireland the general government balance changed from a small surplus to a deficit of more than 32% of GDP; in Spain from a

[1] The influence of these different factors was foreseen and clearly enlightened by Spaventa (2008) in his pioneering analysis, which emphasized the need for an orderly reduction of private leverage. Among the most recent contributions on the theme of excessive private debt, the obstacles that have been encountered in the attempts to reduce it, the small results obtained and the developments of the debate see Buttiglione *et al.* (2015).

surplus of nearly 2% to a deficit of more than 11%; at the same time, in the former country the debt/GDP ratio jumped from a reassuring 25% to almost 100% (a level that has been later largely overcome) and, in the latter one, from a quiet 36 % to well over the fateful level of 60%. In the same time span, in Germany the general government balance turned from a surplus of 0.2% to a deficit of 4.2%, while the debt/GDP ratio increased from 63.6% to 81% (Figures 1 and 2).

Figure 1: General government deficit/surplus % of GDP

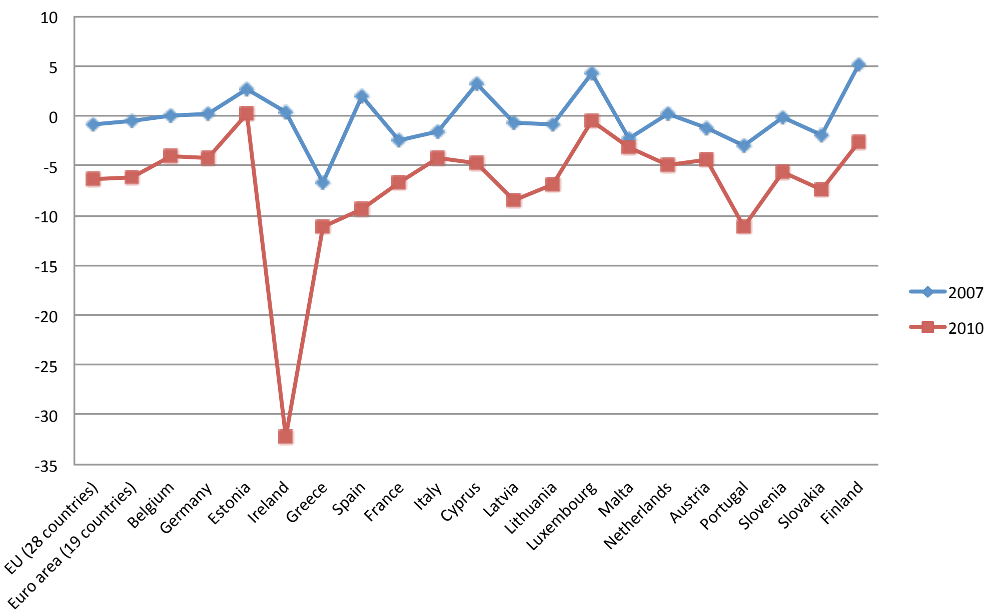
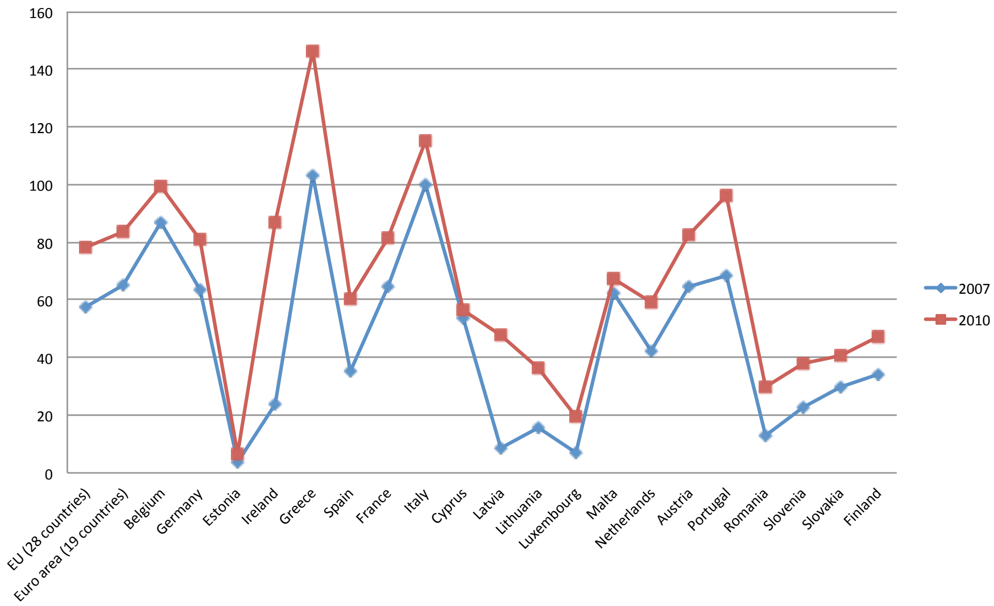


Figure 2: General government gross debt % of GDP



Overall, soaring public deficits and debts have mainly been the effect and not the cause of the financial and economic crisis. They can be attributed to the rescue of the banking systems with public funds and to the operating of the automatic stabilizers, notably taxes and transfers. Only at a later time, especially in countries with a high legacy debt, the deterioration of public accounts was worsened by a crisis of confidence in sovereign debts.[2]

The sovereign debts were no longer considered risk-free. This markets' belief was reinforced by the delays and hesitation with which the Greek crisis was addressed. It was particularly detrimental that the procedures eventually adopted failed both to comply with the no bailout clause and to avoid the private sector involvement (PSI).

At the basis of the perception that the sovereign debts in the EZ are no longer risk-free is the absence of a lender of last resort for government bonds’ markets, an

[2] In a number of cases, the crisis of public finances was accentuated by the poor reliability of fiscal data, highlighted by continued substantial revisions of time series. Among the several accounting deficiencies, the difficulty of assessing implicit guarantees and liabilities was particularly detrimental.

aspect that has long been stressed by De Grauwe (see, most recently, De Grauwe, 2014, 2015).

The lack of this implicit guarantee, which is instead available to countries that have maintained their central banks and national currencies, in which government bonds are issued, exposes the states of the EZ to sudden liquidity crises (difficulties of access to markets) and to upsurges in the costs of the debt (spread). They are thus forced to adopt austerity policies, which, in turn, tend to aggravate the recession.

Moreover, the perception of sovereign risk has strengthened the “diabolical loop” (Corsetti et al., 2015) between banks and sovereigns. The issues of how to evaluate government bonds in the portfolios of banks and insurance companies, and of establishing capital requirements, have been raised.[3]

In such circumstances, in order to ensure financial stability and to face emergency situations in the markets, which were particularly severe in 2011 and 2012, the European Central Bank (ECB) has gradually extended the scope and intensity of unconventional measures. This choice was necessary and useful: the ECB succeeded in stabilizing the markets and preventing dangerous contagions. However, if unconventional measures can ease the symptoms, they cannot remove the causes of economic and financial problems in the EZ.

Moreover a persistent and large recourse to unconventional tools is source of criticism and concern for a number of reasons. First, it can encourage opportunistic behaviour (moral hazard) by highly indebted countries. Second, it can give rise to inflationary flames and bubbles in asset prices, whose resolution may be very costly for the real economy. Finally, in case of insolvency of a member state, the losses incurred by the ECB may fall on the taxpayers of other states.

The drawbacks of a long lasting policy of low interest rates must also be accounted for. Resources are driven towards more risky assets and capital-intensive investments, to the detriment of labour employment. The real income of older people,

[3] As known, this problem has also blocked the completion of the Banking Union, preventing the construction of the third pillar, the Common Deposit Guarantee Scheme, while the other two pillars - the Single Supervisory Mechanism and the Single Resolution Mechanism – have started to operate.

whose main source is the return of assets accumulated during their working lives, is shrunk, with a negative impact on demand and economic activity and with undesirable equity implications. These effects are particularly severe in rapidly aging regions and countries.

It must be also mentioned that, when a change in the stance of monetary policy occurs and the time of unconventional measures and low interest rates comes to an end, the effects on the stability of financial markets and on economic activity will be unpredictable and difficult to tackle.

Finally, while the ECB's monetary policy has proved essential to avoid the disintegration of the euro and to shield the prospects of recovery for the EZ, it is not sufficient to boost growth, if not accompanied by effective measures of fiscal and structural policies in the Member States. In particular, it is unlikely that a process of sustained and lasting growth can restart without overcoming the obstacle of the overhang of private and public debt.

This paper deals only with the issue of sovereign debt, even if the two aspects – private and public leverages - are closely intertwined. It is organized as follows. In the next section, the reasons for reducing sovereigns' debts in the EMU countries are briefly discussed. High public debt can hamper economic growth; it exposes national countries to the risk of liquidity crises, as opposed to insolvency; it restrains both the room for national fiscal policies and the freedom of the ECB to pursue its own monetary policy's goals, being the central bank's choices constrained by the need of preventing debt crises. A high public debt may have relevant social costs, because high interest payments are detrimental to welfare expenditure and limit the possibility of reducing taxation. Moreover the links between public debts and banking system represent a main obstacle to the completion of the Banking Union. Finally, high public debts may not be sustainable in the long run, in the presence of both growing implicit liabilities due to demographic factors and phenomena of tax bases erosion caused by international tax competition.

In Section 3 the different possible strategies to reduce the debt-GDP ratio while avoiding any form of debt restructuring are dealt with. A number of measures, which have often been adopted in the past, are not available at present. In the first place, the most frequently used - and probably most effective - way for burning debt, i.e. a sudden (unexpected) upsurge of inflation, accompanied by a heavy "financial repression" and a strict control on capital movements, is unworkable and probably undesirable today in Europe.

A number of extraordinary finance instruments for cutting the debt of a sovereign - such as wealth taxes, privatization of public companies, sale of public assets - are, instead, viable at least in principle. Their possibilities and limits are briefly considered.

The theme of debt restructuring is considered in Sections 4 and 5. The issue of a once-and-for-all reduction of outstanding debt (legacy debt) is addressed separately form that one of designing a permanent mechanism to deal with insolvency of sovereigns in the EZ. Section 4 is dedicated to the former aspect. The German Council of Economic Experts (GCEE, 2011) triggered a stream of research on the ways to cut down existing debt. Two main proposals followed on the same line: the PADRE program, due to Pâris and Wyplosz (2014) and the plan designed by a group of CEPR's economists (Corsetti et al., 2015). The effectiveness of the two projects in actually achieving the benefits that are expected from debt reduction is questioned. Section 5 deals, instead, with the group of proposals concerning the institution of an ordered procedure of insolvency for sovereigns. Four main plans are considered: the Bruegel's proposal of a *European Crisis Resolution Mechanism* (Gianviti et al. 2010); the resolution mechanism designed by the European Economic Advisory Group of CESifo (EEAG , 2011); the *European Sovereign Debt Restructuring Regime* (ESDRR) proposed by the Committee on International Economic Policy and Reform (CIEPR, 2013) and the proposal of a *viable insolvency procedure for sovereigns* (VIPS), advanced by Fuest et al. (2014). All these plans are meant to make effective the no bail out principle, whose compliance has proved very difficult so far: the question is raised if this perspective is really realisable in the absence of any element of fiscal union.

Section 6 concludes arguing that instead of relying exclusively on bail in, as opposed to bail out, an equilibrium should be looked for between these two perspectives which could effectively address the moral hazard problem.

2. The main reasons for reducing sovereign debts

The main reasons that are usually put forward in favour of a significant reduction of sovereign debts, when they have reached a level that may be considered "excessive", are the following.

1. The persistence of a high, and possibly growing, public debt can hamper economic growth, for a number of reasons. We can mention just two of them. The first is that domestic demand can be restrained by expectations that, because of the debt, future tax payments will overcome the flow of benefits from public expenditure. The second reason is that public debt can crowd out private investments. It is worth noticing that, while most empirical studies find evidence of significant negative long-run effects of public debt on output growth, they instead do not confirm the hypothesis of a universally applicable threshold effect, i.e. a tipping point for public indebtedness, beyond which economic growth drops off significantly.[4]

2. High-debt countries are exposed to heavy risks of liquidity crisis, even when they may be considered solvent, in a context where financial markets swing between periods of *risk on* and *risk off* (Corsetti et al., 2015). This tendency is heightened in the EZß by the uncertain prospects of the monetary union and the confused and wavering way with which the recent events in Greece (and, to some extent, Ireland and Portugal) have been addressed.

3. A high public debt may have relevant social costs, because high interest payments are detrimental to welfare expenditure and limit the possibility of reducing taxation.

[4] Reinhart and Rogoff (2010) estimate a threshold effect at a 90% debt/GDP ratio, using a panel of advanced economies. Among the following literature, which is large and still growing, we limit to refer to Chudik *et al.* (2015), who do not find a statistically significant threshold effect, while stressing the importance of the debt trajectory.

4. A high stock of public debt restrict the room for an active fiscal policy, which could boost domestic demand and investment spending and thus counteract the fall in growth potential, induced by the prolonged and deep recession of the last years. It must be emphasized that the space for a greater flexibility in fiscal rules, recently introduced in the Eurozone system, has contributed, to some extent, to increase, rather than reduce, the degree of uncertainty about fiscal policies perceived by markets, because of a number of issues concerning the interpretation and application of the norms.

5. The reduction of sovereign debts would allow restoring a greater and effective autonomy of monetary policy, freeing it from the need to make more and more use of unconventional tools. The continuous extensions of quantitative easing are progressively reducing its effectiveness, since the expectation of such measures, in the presence of high and rising sovereign debts, prevents other factors from contributing to reverse deflationary expectations.

6. A diabolic loop links the possibility of banking crisis to that one of sovereign debt crisis. In normal conditions the creation of the Banking Union - however incomplete in the third pillar (common deposit-insurance scheme) and still uncertain and questionable in the application of the first two pillars (common supervisory authority and common resolution fund and mechanism) – would significantly reduce the risk of contagion. In the present exceptional circumstances, however, it may end up being insufficient for that purpose.

7. A significant reduction in the stock of sovereign debt would also permit to enhance the credibility of the policy commitments of national governments. Their credibility is presently weakened by two very important phenomena, although difficult to quantify. The first is the looming implicit liabilities, mainly related, on the one hand, to the effects of aging (social security and health expenditure) and, on the other hand, to the guarantees provided to banks. The second phenomenon is the intensification of different forms of international tax competition (see the OECD BEPS project), that undermine the taxing power of the national countries, which is the only real safeguard of the ability to honour the debt service.

These various reasons for reducing sovereign debts assume a different importance in each individual country according to a variety of economic, social and political circumstances. The concrete importance attributed to each of them, in different cases and times, conditions the choice of the instruments that can be employed in order cut the debt/GDP ratio.

3. Cutting public debts: lessons from past experiences

Historical experience shows that, aside measures of restructuring (hair cuts), two other main ways have been followed in order to achieve a large reduction of the debt/GDP ratio. On the one hand, a violent upsurge of inflation, on the other, a prolonged period of economic growth and adequate (but tolerable) primary surpluses. They are, in certain respects, two polar solutions. Inflation is a form of debt repudiation and allows cutting the debt stock very rapidly. With the accumulation of primary surpluses, instead, the initial contractual terms are honoured, but the reduction of debt is necessarily slow and gradual. Beyond these two main ways, other instruments, which will be considered below, have been used, but they can assure only limited reductions of debt/GDP ratio.

The inflationary solution is not feasible today. For sure it is not possible for the EZ countries. In the words of the European Economic Advisory Group at CESifo: "Under the euro … a country cannot inflate its debt away because its bonds are denominated in a common currency whose value cannot be manipulated by national policymakers" (EEAG, 2011, 80). Probably, however, nowadays the inflationary option is neither available for countries which still have a national currency, and, let's say, neither for those countries of the EMU which would decide to return to a national currency by exiting the euro. The reason is that cutting the debt by means of a very high inflationary process requires a number of further conditions, as the just mentioned Italian case can prove: a very tight control of currency and capital movements, strong measures of "financial repression", such as the obligation for the Central Bank to provide cash advances to the Treasury and to purchase whatever quantity of public bonds were not placed in the market, the introduction of portfolio constraints on the assets of the banks etc. (Pedone, 2011). At present, to a large extent, these measures, whose desirability is debatable, are outside the realm of possibility for the majority of countries opened to the worldwide integrated capital market.

Thus, when the inflationary choice is discarded, the other way to reduce the public debt remains, that is to comply with the conditions of sustainability, highlighted by the simple dynamic model of public debt. A rate of growth persistently higher than the interest rate, along with a moderate rate of inflation and a certain level of primary surplus, can ensure a gradual reduction of the debt/GDP ratio to a comfortable level within a reasonable time span. However, fiscal consolidation, that is a series of primary surpluses, should be carried out in periods of expansions, as Keynes suggested and how, among others, the United Kingdom since 1815 and the Kingdom of Italy from 1894 managed to do (Toniolo, 2011).

Instead, when the rate of growth is low or negative, in any case less than the interest rate, there is no inflation, and such situation lasts for a long time, the size of the primary surplus required to stabilize or reduce the debt/GDP ratio may be so high as to be economically counterproductive and socially intolerable. Thus, the austerity policy of the EMU to meet the crisis was, in many cases, ineffective in ensuring the reduction of the debt/GDP ratio and socially costly. Some high debt countries screwed into a vicious spiral of high debt/GDP ratio, restrictive budget rules, their negative impact on growth, further increases in the debt/GDP ratio.

At the origin of this approach, beyond the basic principles of the Maastricht Treaty, the influence of the German *ordoliberalism* and of the idea of a “social market economy”, requiring a balanced budget as an element of economic order, may be envisaged (Di Maio, 2015).

The later developments of the rule-based system established with the GSP were however also influenced by the theory of *expansionary austerity*.[5] According to this approach, in the presence of a perfect Ricardian equivalence between debt and taxes,

[5] A description of the rise and fall of the expansionary austerity myth is in Nuti (2013) and Daniele (2015); a critical analysis is provided in the review article by Krugman (2013) .

a policy of fiscal consolidation would not dampen private demand, because the expansionary effects due to the expectation of lower future taxes would offset the potential deflationary impact deriving from the measures of fiscal consolidation. In addition, cuts in public spending would reduce the crowding out of private investment. The expansive result of restrictive fiscal policy would be accentuated by a permissive monetary policy, by a weakening of the exchange rate and an improvement in expectations and in confidence.

The basic assumptions of the theory of expansionary austerity, however, have proved unrealistic and the values of fiscal multipliers higher than estimated, especially in economies in recession. Nuti (2013) shows that "if the fiscal multipliers is greater than the inverse of the Public Debt/GDP ratio, fiscal consolidation necessarily raises instead of lowering the Public Debt/GDP ratio with respect to what it would have been without consolidation. Fiscal consolidation reduces the PD/PIL ratio only in the least indebted countries that do not need such a reduction". In countries with high debt/GDP ratio it is very likely that a policy of fiscal consolidation brings about the vicious circle mentioned above.

In general, it should be noted that the quantitative assessment of the sustainability conditions is based on very uncertain long-term forecasts and equally uncertain estimates of the complex relationships between the different variables that determine the dynamics of the debt/GDP ratio (stock of debt, interest rates, growth rates, inflation rates, primary balances and their composition). The results of the econometric analysis are, as often happens, ambiguous. [6]

The relationship between the stance of fiscal policy (proxied by the cyclically adjusted primary balance) and the evolution of the debt/GDP ratio is not very tight and unique, because the effects of any given fiscal stance on the debt ratio depend on a very large number of factors and circumstances: the rate of growth and inflation; the monetary policy stance; the foreign exchange regime and capital movements; the functioning and the degree of turbulence in the domestic and international financial

[6] For the relationship between the stance of fiscal policy, measured by the cyclically adjusted primary balance, and economic growth, see Mauro and Zilinsky, 2015 .

markets; the breakdown of the general government debt by subsectors (central government, local governments, other public entities); the structure of debt maturities; the distribution of government bonds between residents and non-residents; the prospects for political stability in the country and the degree of confidence.

A favourable combination of these different elements can certainly start a process of significant reduction, albeit gradual, of the debt/GDP ratio. As well as the effective implementation of reforms that increase the economy's competitiveness and growth potential in the medium term, along with a rise in inflation up to the ECB target, a vigorous expansion of exports, a tolerable level of primary surplus and the continuation of an expansionary monetary policy, could trigger a virtuous spiral: higher economic growth – improvements in primary and overall general government balance - reduction of the public debt/GDP ratio.

However, even supposing such a favourable environment, the reduction in the debt/GDP ratio will be gradual and slow. Thus, both in the presence of a virtuous spiral, and obviously even more so in the presence of the vicious one, the reasons of concern about the effects of high public indebtedness, mentioned in the previous section, may justify considering the possibility of cutting the stock of public debt by means of extraordinary measures.

As a matter of fact, there are a number of historical experiences of the recourse to extraordinary finance tools in order to cut the debt stock more rapidly than what implied by the accumulation of primary surpluses.

This was primarily the case, especially in periods of profound social upheavals, linked to wartime events, of the use of various forms of wealth taxation, including compulsory loans, which are an indirect way of taxing wealth.[7] This solution is still

[7] The discussion of the different forms of amortization, repudiation and conversion of public loans contained in the Public Finance treaty of Einaudi (1948, chapters 7, 8 and 9) is of extraordinary interest, also for the numerous references to historical experiences in every time and country. For an analysis of the long run evolution of the Italian public debt and, in particular, of its early formation in the first fifteen years of the unitary State, see Pedone (2011).

sometimes proposed nowadays in high debt countries like Italy. The obstacles and difficulties, which would be encountered on this way, are not, however, negligible. An extraordinary wealth tax, able to bring down significantly the stock of public debt, should provide adequate revenues and therefore have a very wide base. Then the problems of definition, evaluation and assessment of the various wealth components become central and hard to deal with, on technical as well as on social and political grounds. Let just mention that, for equity considerations, a set of exemption thresholds, differentiated on the basis of the characteristics of the tax unit, should be established. It should also be necessary to take appropriate measures to address the liquidity problems that can arise with a wealth tax, especially when extraordinary. The issue is particularly complex because the probability and the relevance of liquidity problems vary with the magnitude and the composition of wealth. Beyond all these difficulties, there is a strong risk that a heavy wealth tax can hamper demand and distort the allocation of capital and savings. In the Italian case, in addition, real estate, which, for a number of reasons, is the most advisable tax base, is by now already heavily taxed. The taxation of movable wealth, on the other hand, encounter, as it is well known, strong limitations in the present scenario of lack of any control on capital movements.

The demise (or the valorisation) of public properties is another kind of extraordinary measure frequently proposed and used, also in the recent past. It can take on different characteristics, depending on the type of asset to be demised, the channels and methods of the sale, the procedures and the organizational and institutional arrangements involved. Let us just mention that in Italy – but a number of countries are likely to face similar problems - such a perspective has encountered numerous obstacles: the complex and overabundant legislation and regulation; the length of the procedures and the size of the bureaucracy; the overlapping of competences between different levels of government; the difficulty of establishing a correct and fruitful partnership between public and private. [8]

If it is true that the feasibility of extraordinary measures and their efficacy in reducing the stock of debt are limited and if the issues of concern for very high sovereign debts, which have been reminded in Section 2, are considered valid and working concretely, then the various recently advanced proposals for restructuring sovereign debts should be considered and discussed.

The valid objections that such operations imply serious risks - on the one hand, to produce contagion, especially through the banking systems; on the other, to induce opportunistic behaviour on the part of national governments – must be weighted against the high cost of the uncertainty produced by the confused, partial and delayed use which have been made of debt restructuring during the recent crisis of some euro area countries.

4. The "swap" approach to the excessive legacy debt issue

4.1 At the origin of the discussion on Eurozone's debt restructuring: the Deauville meeting.

In October 19 2010, after a walk on the beach of Deauville, Chancellor Merkel and President Sarkozy agreed that, after 2013, financial assistance to sovereigns from the European Stability Mechanism would require that losses be imposed on their private creditors. Their statement sparked a scandal and it was considered a contributory cause of the worsening of the sovereign debt crisis.[9] Since then, only talk, even in an academic seminar, of a default option in the proper sense, that is with capital losses borne by the private holders of government bonds, was long viewed as an unforgivable recklessness. Yet the possibility of losses is part of the contractual

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[8] Astrid (2012) presented a detailed proposal for the reduction of the debt of 180 billion in five years. It would be interesting to investigate the main obstacles that have prevented its realization.

[9] The blame was not justified. Mody (2014) discusses a number of papers on market reactions to policy initiatives and shows that, with the exception of Greece, the increase in sovereign spreads following the Deauville announcement was within the range of variability of the previous 20 days.

relationship between the lender and the borrower and, in case of insolvency, renouncing to a part of the capital can be the most efficient solution for the creditors. On the other hand, avoiding inflicting losses to private creditors is in stark contrast to the prohibition to intervene in support of the insolvent states, a principle that in the Union has a constitutional basis. If sovereigns are not to be *bailed out* then creditors should be *bailed in*, including private people and entities. It is precisely what, in the philosophy behind the architecture of the single currency, should trigger a strict market discipline, designed to contain the natural tendency of states to borrow excessively.

The bail-in should thus have the same constitutional importance of the no bail-out, as implied by it. It is, instead, excluded from the realm of possibility because considered extremely dangerous for the endurance of the monetary union. In particular, it is feared that the recourse to bail-in in case of insolvency of a member state could induce a *double contagion*, with the banking system on one side, with the other high debt countries on the other one, undermining financial stability in the whole Eurozone (EZ).

In the bottleneck of two contrasting clauses - "no bail-out" and "no bail-in" - the only way out has so far been envisaged in a slow process of debt reduction through the accumulation of primary surpluses. The cost of debt reduction is made to fall on the citizens-taxpayers, who should receive less public services and pay more taxes for a long period of time. The *six-pack* and then the *fiscal compact* have set at 20 years the time frame within which all countries should lower the debt/GDP ratio to the 60% limit set by the Maastricht Treaty. The way would be to some extent practicable in the presence of reasonable growth rates, higher than the interest rates. It becomes prohibitive in the absence of growth or with very slow growth. But the absence of growth depends, in turn, from such a fiscal policy stance: it is the infernal circle austerity-debt.

However, despite official anathema, the Deauville meeting triggered a stream of research on sovereign debt restructuring, which, like a Carsick river, has by now produced a consistent body of literature. Two different issues have been addressed.

The first one concerns a once-and-for-all reduction of excessive legacy debt; the second one deals with the design of permanent insolvency procedures for sovereigns. The two perspectives should be kept quite separate, because they answer to different needs and have different institutional implications.

The following of this section consider the proposals mainly addressed to the former issue, even if they do not ignore the longer run's requirements, while the next section is devoted to papers that are focussed on the design of an insolvency mechanism for sovereigns.

4.2 A European Redemption Pact: the German Council of Economic Experts proposal

The line of research on the ways to eliminate the existing excess of debt was opened by the *German Council of Economic Experts* (GCEE, 2011; Bofinger et. al., 2011; Doluca et. al., 2012). About a year after the Deauville meeting, the GCEE presented a plan to reduce to 60% the debt-to-GDP ratio within two decades in all the EZ countries.[10] The proposal of a *European Redemption Pact* (ERP), associated with a *European Redemption Fund* (ERF), aimed to establish a scheme of joint liability in the EZ without weakening the incentives of the member countries to consolidate their public finances. The joint debt mechanism envisaged was intended, unlike Eurobonds, to be temporary, for a period of about 25 years. According to the authors of the plan the aim of demonstrating to the markets "that solidarity will prevail" could "only be reached by strong countries lending their reputation, i.e. their low risk premia in the bonds market, to member countries facing a liquidity crisis" (Bofinger et al. 2011).

The central idea was to separate the part of the legacy debt of each EZ country corresponding to the 60% of GDP from the quota exceeding the threshold. In the roll-in phase of the scheme (2012-2016) the EZ countries would have renewed the maturing debt through the ERF, until the fund had completely absorbed the part

[10] The proposal was initially contained in the Council's annual report 2011-2012, released on 9 November 2011.

exceeding 60% in each country. Each participant should henceforth service its own debt posted into the fund, until it was completely redeemed and the fund expires. However, given the joint liability, countries with bad reputation would have benefited of the better reputation of the most reliable countries through a relevant reduction of the cost of servicing the debt.

A “serious commitment” was required to guarantee that the debt not included in the fund would not rise again above the 60% threshold. According to the German experts, this need could be satisfied by the introduction of “debt brakes” into the participants’ national constitutions.[11]

Two further guarantees were called for. The first one was to earmark part of the revenue of a major tax (VAT and/or the income tax) to the redemption of the debt (“special tax provisions”). The second one was a deposit of part of the national currency reserves: it was estimated that these latter provisions could amount to the 20% of the fund. Whenever a participant failed to honour its commitments, it would forfeit the collateral deposited into the fund.

The authors of the plan were fully aware that the redemption would have required “tremendous efforts” (Bofinger et al. 2011) from countries starting the process with a higher debt ratio. The example of Italy was revealing. The required annual primary surplus for Italy to redeem its debt in the fund in a time span of 20 years (2016-2035) would be 4.2% of GDP, assuming a nominal GDP rate of growth of 3%, a cost of the debt in the fund debt of 4% and an interest rate on the remaining debt of 5%. However, according to the authors, the scheme should still be attractive to Italy because the primary surplus required to achieve the same reduction in debt without the ERF scheme (assuming an interest rate of 7%) would initially be more than 8% of GDP (GCEE, 2011, table 13).

Conversely, participating to the fund would have been a disadvantage for Germany. However - it was emphasized - the participation would have been worthwhile even for Germany if the alternative had been “the worst-case scenario of

[11] “Debt brake” is the literal translation of the German “schuldenbremse”, introduced in article 109, paragraph 3 of the Basic Law in 2009.

unlimited refinancing of EZ members through the European Central Bank" (Bofinger et al. 2011).

In rereading today the GCEE proposals, it is striking to notice how the "worst-case scenario" dreaded by the German experts began to materialize just in the aftermath of the presentation of the report. The plan was announced on November 9, 2011: shortly after, on December 22 the first LTRO (*long term refinancing operation*) auction opened the season of unconventional monetary measures of the ECB. The ensuing story - through the Draghi's announcement "whatever it takes to preserve the euro" on July 26, 2012 up to the launch of quantitative easing in March 2015 - is well known. The reduction in the cost of debt, i.e. the benefit that German experts envisaged for high-debt countries from their project, was instead the result of the monetary policy implemented by the ECB: the Italy-Germany 10 year bond spread collapsed from the maximum of 505.63 reached on August 2, 2012 to the minimum of 87.51 in March 12, 2015.

On the other hand, in the meantime, the time span of 20 years for the reduction of the debt ratio to 60%, contemplated in the plan, has been institutionalised as a fundamental rule of the SGP both by the *six-pack* and the *fiscal compact*. Thus the GCEE redemption plan proposal seems to have been quickly overcome, on the one hand by the encroachment of monetary policy in territories that the plan would have liked to foreclose and, on the other hand, by the reception of the goal of a twenty-years time for debt reduction to 60% within the framework of budgetary rules, rather than within the once and for all perspective assumed with the plan. In this last respect, however, on closer inspection, the two options do not look so much different in their substance, because both of them rely on "tremendous efforts" imposed to high debt countries.

Nevertheless the philosophy underlying the plan of the German experts did not extinguish. Instead, the way opened by the GCEE report has been followed by a number of authors. The remainder of this section considers two major projects of sovereign debts restructuring in the EZ: the PADRE project (Paris-Wyplosz, 2014) and the plan recently developed by a group of economists from different countries under the auspices of the CEPR (Corsetti et al. 2015).

These two proposals are particularly representative of the main terms of the current discussion. Both of them move from the conviction that a substantial restructuring of EZ public debt is an inescapable condition to restart growth and to get out of the austerity-debt trap. It is however recognized that, in the present state of things, the restructuring must be designed in compliance with two main political constraints, even if the possibility of their slack is taken into account in both plans. The first constraint is to exclude transfers between states, deemed inadmissible in the current state of development of European integration, given the absence of a common fiscal policy: an aspect, that of sharing fiscal policy, which instead characterizes federal countries, where the redistribution between different member states is a foundational element of togetherness. The second constraint is not to inflict losses on private creditors, i.e. to avoid bail-in, which, as we have seen, is considered too risky for the stability of the financial markets at this stage.

4.3 The PADRE plan

According to the PADRE project (Paris-Wyplosz, 2014) the EZ countries should ask the ECB to buy in the secondary market government securities of each country at their face value. The purchases are to be divided between the different member states according of the ECB's capital keys. The decision must be taken by governments, not by the ECB, because the action belongs to the realm of fiscal policy and therefore is outside the mandate of the ECB. In principle the ECB could even reject the request, being an independent institution.

The ECB purchases the governments’ bond in the market, but does not hold them among its assets: if that were the case, it would result in transfers between states, given the differences in interest rates on the various national debts and the different degree of risk. It also would create an incentive not to honour the debt, because the loss would be shared between the different countries according to their capital shares.

The envisaged solution to both problems is to change the sovereign bonds acquired by the ECB into other bonds with zero interest rate. The ECB, then, transforms (swap) the sovereign bonds acquired into irredeemable zero coupon securities (perpetuities). These securities are recorded at the face value on the asset side of the ECB's balance sheet. The ECB's finances its purchases by issuing its own bonds (ECB Notes), which are interest bearing, choosing the most appropriate maturity structure. These notes are posted on the liability side of the ECB balance sheet. Therefore the ECB, having bought non-interest bearing securities financing itself by issuing interest-bearing securities, will suffer annual losses indefinitely. The present value of the infinite series of annual losses corresponds to the debt that is cancelled out with the swap operation. These losses reduce the seigniorage income of the ECB, so that each country bears a loss in proportion to its share in the ECB capital, which is also its share of debt cancelled out. There is therefore no transfer between countries: the cost of the operation falls fully on the present and future generations of taxpayers in each country.

The authors of the PADRE plan note that in theory these losses could make the ECB to fail, but they argue that central banks can not fail, because the seigniorage always allow them to recapitalize. The claim is in principle acceptable, but its concrete application to the ECB case would deserve further scrutiny, because the ability of the ECB to generate seigniorage is constrained by statutory limits and may result severely limited by operational difficulties.

For the aftermath of the restructuring, the PADRE project requires that the member states subscribe a binding covenant that avoids the accumulation of new debt. An upper limit to the debt/GDP ratio should be fixed, above which would take effect a debt containment mechanism that should be simple and automatic. The upper limit on the debt can be made to coincide with the level reached following the restructuring, increased by a margin (e.g. 10%) to allow for some flexibility. If a country exceeds the limit, the ECB would exercise a put option on perpetuities, for an amount equal to the share of debt of the country concerned, which would have the obligation to repurchase them. The government of the defaulting country would have to issue debt to finance the purchase. There would be therefore a swap with an opposite sign to that one initially put in place with the operation of restructuring, the perpetuities being transformed back into interest bearing debt. If the non-complying country refuses to repurchase the perpetuities, it would be considered in default. A number of measures is envisaged in order to deter deviant behaviour and to force the state concerned to acquire the perpetuities: it is contemplated, for example, to allow its debtors to settle their obligations (e.g. taxes) with perpetuities.

It is not surprising, at the light of the simplest arithmetic of the debt/GDP ratio, that the feasibility of the PADRE project depends on the relationship between the rate of growth and the interest rate. The authors show that, assuming to restructure half of the public debt of all EZ countries, an inflation rate of 2%, a rate of growth in real terms of 1.5% and an interest rate of 3.5% (i.e. an interest rate equal to the nominal rate of growth), the present value of the infinite series of income from seigniorage would largely exceed the present value of the infinite series of losses due to the restructuring. For 50 years, however, the annual losses would exceed the annual income from seigniorage. Already with an interest rate of 4%, the other assumptions being the same, the present value of the income would be less than the losses and the restructuring would not be feasible. Instead, with a nominal growth rate higher than the interest rate, the present value of the seigniorage is infinite. That is the case, for example, if, keeping inflation at 2% and the interest rate to 3.5%, the real growth was 2%.

The sustainability of the PADRE project depends, therefore, crucially on the ability of the one-off cut in sovereign debts to stimulate growth in the EZ and to contain nominal interest rates, provided that the ECB is successful in achieving its objective of an inflation rate close to a 2%.

Two possible variants of the plan are evaluated in case it proves unsustainable. The first possibility is to reduce significantly the amount of debt cancelled; the second one is to allow for some transfers between states. In the first perspective, the study simulates the effects of a debt reduction of outstanding debt equal to half of that provided for in the basic exercise, that is to say a 25% reduction instead of 50%. The conclusion is that the effects in terms of reduction of debt in the highly indebted countries would be too small, of a size that would not justify the political and technical costs of the operation. Instead, removing the constraint of absence of transfers, although very complicated from a political point of view, would be more promising. The study simulates the possibility of reducing the stock of debt of each country for a share equal to that of the ECB's capital, corrected by the difference between the debt/GDP ratio and the average for the EZ. It is shown that, in this case, a reduction of the debt GDP ratio of 25% would allow to reach results, in terms of reduction of the debt/GDP ratio, very close to those obtained in the basic assumption. Distributional effects, however, would be particularly heavy for the small and low debt countries. It is then discussed, as a further alternative, the possibility of allowing countries not to join the plan.

Finally, the possibility of limiting the debt restructuring to the most indebted countries is considered. The study simulates, for example, the effects of applying the scheme only to countries with more than 80% debt/GDP ratio, reducing the share of debt required to bring to 80% the most indebted country (Greece).

4.4 The CEPR proposals

The CEPR plan (Corsetti et. al. 2015) moves along similar lines. Each country of the EZ, participating to the scheme, would commit a certain amount of future budget revenue to redeem (buyback) a large fraction of its outstanding debt. The expected flow of such revenue, along a very long time span (50 years), would be capitalized into a stability fund. The revenue, that governments should constrain for this purpose in a credible way, would result from one or more additional taxes and form seigniorage. In particular, among the taxes which could possibly be used for the purpose, a VAT increase and a tax on wealth transfers are discussed. As the project PADRE, the stability fund, which could act under the supervision of the ESM, would convert the debt into non-interest-bearing perpetuities, in order to rule out any transfer among countries. The fund would finance by issuing interest-bearing securities, whose interest would be covered by the current fiscal revenue stream entered to the fund from participating countries, while the future revenue capitalized would represent the collateral.

So far the main difference with the PADRE project is that the latter relies exclusively on seigniorage. The group of economists who worked at the CEPR project believes, instead, that seigniorage, if distributed to the participating countries according to the ECB keys, in order to avoid transfers between states, would be far below what is necessary to bring all countries to a debt/GDP ratio not exceeding 95%, which is the goal of the project. The amount of seigniorage available for the scheme should, in fact, be quantified very prudently, giving the assurance that the operation would not affect the possibility for the ECB to cover potential temporary budget losses and avoiding interference with the Bank's mandate of ensuring price stability.

In the overall architecture of the design, however, the CEPR gives more space than the PADRE project, to the possibility that the debt restructuring could lead to both transfers across states and the involvement of the private sector.

A first possibility of transfers is that of pooling the seigniorage, which in this case would be sufficient to finance a debt ratio cut for all states to the target level of 95%, without the need to resort to taxes. A second possibility, that is discussed, is that of a "solidarity levy", such as that applied at the time in Germany to finance the unification. In particular an increase in VAT in each country, which ensures an increase in the revenue corresponding to a percentage point of GDP, is considered. The revenue would then be redistributed between the states on a per capita basis.

On the second aspect, that of involving the private sector, imposing on bondholders some of the cost of the debt reduction, the CEPR report envisages a debt-equity swap. In all EZ countries, a given share of government bonds would be converted to GDP-indexed bonds, that is, bonds in which principal and/or interest payments depend on the rate of growth of GDP. Within the swap operation a haircut could also been imposed on debt holders. The haircuts could vary across countries. Countries with ample fiscal space could choose the characteristics of the GDP indexed bonds so as to avoid haircuts. Instead, in high debt countries, the debt-equity swap would imply significant haircuts on investors, “provided, of course, that the banking system can absorb the corresponding losses” (Corsetti et. al., 2015, p. 31).[12]

The CEPR report also contains a series of recommendations relating to the issue of how to prevent, after the restructuring, the accumulation of new debt by the states. The restructuring has, in fact, the purpose of allowing a restart, by pressing the reset button, but the problem remains how to remove the causes that have brought to debt excesses. The report emphasizes the need to build a new institutional framework and rules that prevent the moral hazard problem, making fully credible the commitment not to resort to bail out. The conditions should be envisaged so that, in case of insolvency, it would be possible to proceed in an orderly way to debt restructuring involving private creditors (private sector involvement).

The issue will be more extensively dealt with in the next section. On this topic, the CEPR report moves along the lines designed by the IMF with regard to new contract rules that prevent the problem of holdout in the case of debt restructuring, the reform of the ESM lending framework etc.

With reference to a key issue - how to break the loop between sovereign debt crisis and banking crisis - the report proposes the creation of a synthetic bond representative of a number of national debts. The bond should be risk-free and could therefore be held by banks without being involved in possible insolvency crisis of sovereigns. It should be noted that, conversely, within a revision of Basel accords, a greater degree of risk should be attached to remaining sovereign bonds and to those newly issued, with negative consequences for the banks' capacity to meet the capital requirements at any given volume of risk-weighted assets.

[12] It may be recalled that the hypothesis of a new type of sovereign bonds with characteristics similar to those of equities, has been widely considered in the literature. Barkbu, Eichengreen and Mody (2012) and Mody (2013) envisage, for example, the use of "coco" (contingent convertible) bonds, built on the model of banks contingent bonds, convertible into equity when their equity ratios fall below a given threshold. Similarly, with the sovereign cocos, the contract should provide that the capital repayment and interest payments are contingent to certain economic and financial developments.

4.5 Some doubts about the effectiveness of the "swap proposals" for the legacy debt reduction

The bulk of the proposals for a one-off reduction of the existing stock of sovereign debt in the EZ is built under the constraint of avoiding the PSI, at least until the conditions are created for the establishment for an orderly insolvency procedure for sovereign states, in particular until the diabolic link between sovereign debt and banking sectors is disentangled.

The CEPR project itself, which, as we have seen, considers the possibility of PSI, devotes only a few hints to this perspective, leaving wide open the question of its sustainability from the point of view of banking sector stability.

How to bring down the debt ratio while protecting against any possible loss both the official sector (no bail-out) and private bondholders (no bail-in)? Unavoidably the cost of debt restructuring must be charged to present and future taxpayers of the involved country. But what is then the difference with the current strategy of accumulation over time of primary surpluses? None, except as regards the temporal distribution of flows and costs. In terms of present values, the two ways are equivalent: the "swap" proposals are not properly dealing with debt restructuring.

Then no advantage can be expected from this approach to the issue of debt overhang? Not necessarily. The challenge is that a large cut of debt all at once, instead of its slow erosion over time, can give a strong boost to growth, which could open up fiscal space. For the effectiveness of the plan this additional space should be larger than the one needed to set aside the fiscal resources that have been bound as funding sources and as collateral in the operation of debt conversion. Only in this case a real advantage would be gained in terms of possibility of expansive fiscal policies.

It should be noted, that it would also require a major overhaul of the current set of rules on nominal and structural budget balances, which is not proposed and discussed as part of these projects. If you will, in fact, that the reduction of the debt stock will open new and more space for active fiscal policies, it is necessary that this is also made possible from an institutional and regulatory perspective. It should also be considered in this light, that some of the current rules, such as the reduction in the debt/GDP ratio to the 60% limit in the space of two decades, would be redundant after the restructuring.

The main question, however, is if indeed it can be expected that a swap of sovereign debt can be a decisive element to restart growth. It is like betting on the groundlessness of Ricardian equivalence. It is not clear why the securitization in a stabilization fund of a flow of fiscal resources should change the spending decisions, in particular the choices of firms on investment, compared to the current situation, in which the same amounts of resources are in fact bound because of the agreements on fiscal rules. In the early perspective of the GCEE report of 2011 the greatest benefit for high-debt countries was expected from the reduction in the spread, as a result of “the loan” to the weakest countries of the higher reputation of the stronger ones. But, as already said, in the meantime, the reduction of spreads and the lowering of interest rates to unusual levels have been the product of unconventional monetary policy gradually put in place by the ECB. And such a policy has not yet produced the desired effects in terms of growth and higher inflation. Then the proposed swap operations of sovereign debts can at best be seen as the way to restore freedom of manoeuvre for monetary policy and bring it back within conventional territories. Instead, from the point of view of opening new spaces for fiscal policy, it seems that little can be expected. Then, it would remain also intact the social hardship of reducing the stock of debt by means of hard primary surpluses.

The scenario would be quite different if it were accepted, even to a limited extent, the possibility of transfers among states. The CEPR report is illuminating in this respect, where it shows how, in this case, the distribution of seigniorage, even calculated in a conservative way, would be sufficient to reduce to 95% the debt ratio in all the EZ countries. However within the Union, the appetite - as is commonly said these days - for federal redistribution seems by now entirely lacking, even more than it was at the time of GCEE report (2011), but also of the CEPR one (2015).

5. A global insolvency procedure for the Eurozone?

In this Section some contributions to the ongoing debate on establishing a permanent insolvency regime for sovereign states in the euro area are briefly considered. These projects, as already mentioned, must be distinguished from those considered in the previous Section, which address the issue of restructuring outstanding debts and design transitional mechanisms in order to bring the debt/GDP ratio in all EZ the countries below a level deemed acceptable in a given span of time. Three main differences between the two groups of projects may be outlined.

The first difference is straightforward: the latter group of designs refer to the past (legacy debt), while the former to the future (newly issued bonds). This is because resolution mechanisms for cases of sovereign insolvency are considered viable only with reference to government bonds issued after the entry into force of the new insolvency regime and not to pre-existing debt. An insolvency procedure for outstanding debt is seen as an unacceptable change in the initial contractual terms, whereas, for bonds to be issued, the contract will contain clauses relating to the insolvency procedure.

A second difference is that the problem of a cut in legacy debts can be addressed within the current legal and institutional framework of EMU, while the establishment of a permanent mechanism to deal with situations of sovereign crises requires amending the Treaties, with all the procedural, institutional and political consequences that this entails.

A third difference, finally, is that the projects relating to the existing debt waive private sector involvement (PSI), although, as we have seen, eventually such a possibility is sometimes considered, but quite marginally. The PSI is, instead, the primary goal of the other group of project. The reasons for excluding the PSI when restructuring outstanding debts may be found, in the first place, on ethical grounds, as already mentioned with reference to the first difference. [13] In the case of legacy debt,

[13] On the ethical implications of sovereigns' default see Buchanan (1987) and Brennan-Eusepi (2002).

the PSI would not be ethically acceptable, because the possibility of a debt restructuring is not covered by the initial contracts. The problem would not arise, instead, for new issues, whose contracts would include rules to deal with such contingencies.

A PSI when restructuring legacy debts is also considered very risky. The problem concerns mainly banks and other financial intermediaries. Limiting their exposure to sovereigns is both a condition and a goal of establishing resolution mechanisms for sovereigns. It is a condition, because, if the link between banks and sovereign debts is not preliminarily loosened, it is feared that the involvement of the former into the insolvency procedures of the latter can jeopardise the stability of financial markets and, ultimately, the endurance of euro. It is also a goal, because the establishment of specific rules to deal with sovereign insolvency is meant to increase the awareness of financial operators about the risks inherent in the loans to sovereigns: their propensity to lend to them would be constrained. Such a design is in close connection with the bank resolution mechanism, approved under the Banking Union and already operative. The bail in of the subjects exposed with banks (shareholders, bondholders and depositors) would submit the latter to a stricter market discipline. In turn, the bail in of the banks in the sovereign insolvency procedures should exercise the same effect with regard to sovereigns. A number of issues and concerns about such connections will be raised in the last paragraph of this Section.

5.1 The debate and the proposals for the euro area: the Bruegel report (2010)

The theme of insolvency rules for sovereigns, which only recently has been addressed in Europe, is not at all new in the wider international community. [14] The issue was alive at least since the 80s (the Brady plan was in 1989), with reference to a number of countries, largely but not only South Americans, who had heavily borrowed in the previous decade. It came back on the agenda with the Mexican crisis of 1994-95. In the early 2000s the International Monetary Fund (Krueger, 2002; IMF 2002, 2003)

[14] Comprehensive reviews of the proposals and the actual experiences of sovereigns' default are contained in Gianviti et al (2010), CIEPR (2013), Fuest et al. (2014), Dolls et. a. (2016).

proposed a *Sovereign Debt Restructuring Mechanism* (SDRM). The proposal aimed to neutralize the problem of holdouts in the event of negotiations for restructuring a sovereign debt. It provided, in particular, for the redefinition of collective action clauses (CACs) allowing for the aggregation of the voting procedures across groups of bond issues, in order to limit the power of minority veto. It also planned to make the outcome of the vote binding for all bondholders in order to prevent holdouts from claiming for a full refund. The proposal aroused much debate, but in the end it produced nothing, especially because of the strenuous opposition of some private finance sectors. [15]

The debate in Europe was triggered, as we have seen, by the declaration of Deauville. A few days later (October 28-29), the European Council stated: "Heads of State or Government agree on the need for Member States to establish a permanent crisis mechanism to safeguard the financial stability of the euro area as a whole … not modifying article 125 TFEU ("no bail-out" clause). The European Council welcomes the intention of the Commission to undertake … preparatory work on the general features of a future new mechanism, i.a. the role of the private sector, the role of the IMF and the very strong conditionality under which such programmes should operate."

A number of proposals for establishing a permanent mechanism for the resolution of sovereign debt crisis followed.

These proposals move from the acknowledgement that, on the one hand, the fiscal rules are not sufficient to avoid crises of sovereign debts and, second, that, when these crises occur, there are no rules to cope with them. It is noted that, without rules, the no bail out clause is not credible: the issue of soft budget constraint arises, and the Greek case was there to confirm it.

At first an important report was released by Bruegel towards the end of the same year (Gianviti et al., 2010). It proposed a *European Crisis Resolution Mechanism* (ECRM) based on two pillars. The first consisted of a procedure to start and carry on negotiations between a state in conditions of insolvency and its creditors, which would

[15] This line of action has been recently re-proposed by the Fund, following the experience of litigation between the holdouts and the Government of Argentina started in 2013 (IMF, 2014).

lead to a binding agreement for all creditors on the amount and manner of restructuring, in order to restore the sustainability of its public finances. The procedure must be incardinated in a special court, which could be identified in the Court of Justice of the European Union or in a special room of its. The second pillar consisted of a set of rules for granting adequate financial support to the state concerned, as an integral part of the crisis resolution mechanism. Financial assistance would be subject to reaching an agreement between the sovereign debtor and its creditors.

5.2 The proposal of the European Economic Advisory Group (2011)

Shortly after the Bruegel report, the European Economic Advisory Group (EEAG) of CESifo (Munich) presented - as part of the 2011 European Economy Report - its own proposal for a crisis mechanism in the EZ (EEAG , 2011).

The document starts with the distinction between illiquidity, impending insolvency and actual insolvency. A liquidity crisis is when a sovereign has temporary difficulties of access to the markets despite being solvent, in which case no restructuring is necessary, but only financial assistance strictly limited in time. Impending insolvency, instead, denotes a condition in which the sovereign state has serious difficulties in meeting the payment of debts as they come due at maturity, but this situation can be overcome with a restructuring of a limited extent and with the help of substitutive securities (*replacement bonds*) issued by the ESM and partially guaranteed (80%). Actual insolvency, finally, occurs when the state has very serious problems of sustainability and the difficulty is not limited to the renewal of maturing debt, but the entire debt on the market is at risk.

It is established that all new debt contracts include a collective action clause ("CAC bond”) that contemplates the possibility of an agreement about restructuring between the sovereign debtor and a qualified majority (i.e. 75%) of creditors holding bonds with the same maturity. The agreement is binding for all the holders of that class bonds. Creditors accept the rule when they subscribe the contract. Important enough, the majority rule should apply only to that group of creditors and only within that group should the agreement be binding over all. Holders of bonds with later maturities must remain non-parties. For negotiating the refund of their bonds, they have to wait for the moment when their bonds mature.

It is thus a multi-step mechanism (piecemeal solution), deemed indispensable to face gradually a situation of impending insolvency and preventing it to degenerate into a real default. The CAC bonds make the risk of a hair cut explicit and structured, and the mechanism is designed to prevent panic attacks near or during the negotiations.

The sequence is designed as follows. In the event of a debt crisis of a state, it is assumed at first that it is a liquidity crisis. The ESM intervenes with loans of a limited extent and for a short period. If, on expiry of the period, the situation remains difficult, the diagnosis will be of impending insolvency. The state must then negotiate the hair cut with creditors that hold bonds at maturity. After the agreement, the residual value of securities is convertible into the ESM replacement bonds, guaranteed at 80%. The holders of bonds with longer maturities are not involved: they have to wait their turn at the maturity of their bonds. The amount of hair cut should be determined by the market: it will be equal to the reduction in the value of bonds during the three months preceding the announcement of the negotiations, within a minimum (20%) and a maximum (50%). Then the greatest possible loss results 60% (maximum 50% of hair cut plus another possible maximum of 20% on ESM securities). If the country can not sustain the service of replacement bonds, a situation of actual insolvency of the entire outstanding debt should be declared.

5.3 Other proposals: the European Sovereign Debt Restructuring Regime (ESDRR) and the Viable Insolvency Procedure for Sovereigns (VIPS).

In 2013, the Committee on International Economic Policy and Reform (CIEPR, 2013) proposed the creation of a European Sovereign Debt Restructuring Regime (ESDRR).

The scheme was to be implemented by amending the ESM Treaty. The Treaty change should authorize the ESM to lend only conditionally to debt restructuring and should establish the guidelines for determining the minimum amount of hair cut. The modification of the Treaty would also have to make the assets and payments of the restructuring state immune from attacks by holdouts. The restructuring scheme was to be embedded into the framework of existing European fiscal rules, by using the 60% debt level as a threshold for conditioning official lending. At debt levels below 60%, the ESM loans would have been unconditional. Above 60% to an upper threshold, tentatively set at 90%, the assistance from the ESM should be conditioned to the fiscal consolidation measures and structural reforms. Above the upper limit of the ESM loans would be subject to debt restructuring.

Two rules were foreseen to govern the amount and forms of restructuring. The minimum hair cut should bring the debt level below the upper threshold and the shorter maturity debt would be subject to a heavier cut.

This proposal wanted to reconcile the goal of limiting the range within which states can gamble for bail out, and the consequent moral hazard problems, with the need for some flexibility in dealing with crises.

The proposal of a *viable insolvency procedure for sovereigns* (VIPS), advanced by Fuest et al. (2014), moves along partially similar lines. Under the proposal, the ESM financial assistance should be strictly limited to a "shelters period” of three years. After that, the debtor country must choose between returning to the market or start of the insolvency procedure. If the country does not consider the market conditions acceptable for new issues, the only option, which is left, is to open the procedure in order to restructure its debt.

The negotiations between the debtor country and the representatives of the creditors are moderated by the ESM. The start of negotiations triggers an immediate moratorium on the debtor country's debt service. Providing privileges to certain groups of creditors must be kept to a minimum, in order to protect the interests of the creditors as a whole. During the phase of negotiation, the ESM provides the necessary liquidity to ensure basic public functions. The maximum duration of this liquidity assistance is twelve months, which, consequently, is also the maximum time for the negotiation.

It is considered not appropriate, nor theoretically justified, to predetermine the extent of the hair cut. The insolvency procedure should only include a rule to determine the maximum loss. However under no circumstances should the debt settlement push the debt/GDP ratio below the Maastricht reference value of 60%. Instead, a hair cut which leaves the debt level above the 60% should be possible, if the debtor country is deemed solvent also with a higher debt level, for example because of favourable growth prospects or for the presence of large public assets.

A key difference with the previous proposals is that the ESM loans during the shelter period should be included in the debt restructuring. A taxpayer exposure to risk is therefore considered inevitable. The recognition of a privileged status to the loans granted by the ESM in the shelter period is deemed to reduce the stabilizing properties of the mechanism. In the case of seniority of ESM loans, the quality of private loans to the country in crisis would worsen progressively as the share of ESM increases. Thus the shelter period could not fulfil its diagnostic and stabilising function. However, the potential losses for the ESM (and, therefore, taxpayers) should be limited by specific rules on the maturity structure of government bonds, which limits the liquidity requirements during the period of protection.

Like the other projects, even the VIPS plan tackle the issue of minimizing the risks and uncertainties arising from the possibility of long disputes with holdout creditors. Two main precautions are suggested. First, the CACs as currently prescribed by the ESM treaty should be revised through a stronger aggregation principle. The quorums for single bond issues are to be eliminated completely, an aggregate quorum being necessary and sufficient condition for creditors decisions binding on all. The aggregate quorum should be reduced to two-thirds of the invested capital. Secondly, a new rule should be introduced in the Treaty to allow the euro area countries, involved in the program through the ESM, immunity from creditors attacks.

5.4 Major issues

The designs of an insolvency procedure for sovereigns of the euro area respond to the objective of integrating and partially replacing the current rule based system, whose limits are by now much evident, with mechanisms relying more on market discipline. That is, the principle of no bail out must become fully operational in the event of a crisis of sovereign states, and this implies adopting bail in. When the prospect of losses will be fully embedded in the expectations of people and entities buying government bonds, then the no risk assumption will fall definitively and, as a result, sovereigns will find more difficult to borrow. This new scenario presumes that the diabolic loop between banking systems and sovereign states is loosened, because at present such a loop limits, as we have seen, the possibility of imposing a real burden on the private sector by means of an insolvency procedure for sovereigns. This is one of the main reasons why, with the banking union, a resolution mechanism for banks has been adopted that relies on the bail in. The change from bail-out to bail-in moves the burden of losses from taxpayers to shareholders and creditors of the banks, with the aim of reducing opportunistic behaviour (moral hazard) and expose the banking system to market discipline. The next step is meant to do the same with sovereigns, adopting a resolution mechanism of the kinds that have been briefly reviewed in this Section implying PSI.

However, there are sound reasons to believe that, in the current circumstances, the bank resolution mechanism, on the one hand, can not completely avoid risks of contagion and, on the other, it can induce pro-cyclical behaviour by banks and lead to a high litigation.

The objective of reducing moral hazard cannot be fully achieved, especially for banks with a diversified shareholder base, because, for a number of reasons, shareholders cannot control managers fully, while the creditors (bond holders and depositors above a certain level) not even have an institutional space for trying to discipline the managers. They can only do so indirectly by shifting their resources outside the banking system, towards other investment sectors, which, however, at present have small prospects of profitability. All the more so, in the absence of the banking union's third pillar, the European Deposit Guarantee Scheme, for which the actual size and the ways of funding are still uncertain (as are those related to the resolution fund of the second pillar). Moreover, pro-cyclical behaviours of banks derive from the difficulties of capitalization.

Thus in order to avoid consequences on economic activity, governments resort to indirect and various forms of intervention, as happened in some recent experiences, proving that, in addition to market discipline, some form of insurance (with all the measures tested in the insurance industry to reduce the moral hazard) may contribute to financial stability and that the contrast between savers and taxpayers, as recipients of the losses, should be used with caution if you want to avoid high costs for both.

A similar issue arises with regard the relationships between the states of the euro area. As we have seen, both the plans for the reduction of outstanding debts, and those concerning the establishment of permanent mechanism to address sovereign insolvency, are difficult to implement in the absence of some forms of even partial risk sharing.

One way to achieve a form of insurance (risk-sharing), which would also imply an overall reduction of risks, is to move towards a kind of fiscal or budgetary union.

The numerous proposals for fiscal union (FU) for the EZ, so far formulated, have very different forms and content. They range from the establishment of a genuine federal state to the appointment of a EZ Finance Minister responsible for monitoring and ensuring compliance with the fiscal rules. The details of such proposals and the timing of their implementation can not be examined here, even if such details and timing would deserve a great attention, because they are crucial for the practicability and effectiveness of the designs.

Only a few issues that should be addressed and resolved and which are decisive in determining the actual content of the FU can be mentioned. A FU implies a transfer of budgetary decision-making powers - both on the expenditure side and on the revenue side - to the Parliament and the Federal Government. This requires individual member countries renouncing national sovereignty to some extent. What may be taken for sure is that, without attributing the Union an - albeit limited - autonomous power to tax, the EU would remains an aggregation of fragile and unstable countries, as demonstrated by Einaudi (1945) with reference to the two constitutions of the United States (1781-1787 and 1787).

The assignment to the Centre of a more or less extensive independent power to tax would also allow a federal debt (authentic Eurobonds), whose repayment and interests would precisely be guaranteed by the power to tax. In the end, as happens in the federal states, only bonds issued by the Federal Government could be purchased by the central bank, while bonds issued by Member States would lose their characteristics of sovereign debt. Then, the debt of States could much more easily been restructured and renegotiated than in the present circumstances. Moreover, as happens in the federations, the no bail-out clause referred to the states could be much more easily complied with, at least in principle.

The FU would also allow a better stabilization of the EZ economy and in particular to deal with asymmetric shocks, for example recessions in single countries, without implying permanent and unconditional transfers among states. Of course, its implementation would require the settlements of very sensitive issues related to the choice of the indicators and of the policy instruments.

The transfer of sovereignty and the sharing of the risks, required by a FU, may be realised to different extents and with different timing. It is however unlikely they can take place in an atmosphere of mutual distrust and if the various aspects of the FU are not dealt with in a unitary framework. The start of a path towards a FU without in-depth analysis and an extensive public discussion, could increase the feeling, on the part of the peripheral countries, that expensive and ineffective austerity policies are imposed to them from outside, and, by central countries, that permanent transfers will be paid by their citizens. In both cases bypassing the normal democratic procedures for setting economic policy and budgetary decisions established by the constitutions of the individual countries.

6. Conclusions

In recent years, the economic policy debate in the EZ focused on how to reduce sovereign debt, particularly in the most indebted countries, rather than on how to boost growth and employment. It seems that we are going towards a state of substantial preclusion of the possibility to resort to debt by UE Member States. At the same time such a possibility is not assigned to the Centre by establishing a Fiscal Union, as occurs in the context of federal states. Thus the debt is banned both at the Centre of the Union and in the Periphery. Instead, in other advanced countries (as Japan, UK, USA) and also in many emerging economies, the use of debt is allowed and is extensive.

Many of the reasons to significantly reduce the debt/GDP ratio in the most indebted countries, which have been briefly mentioned in Section 2, are common to all countries.

The greater emphasis and urgency, with which this issue is addressed in the EZ are due to a number of factors:

1. the influence of the principles of the “ordoliberalism” and of the "social market economy" – among which that one prescribing a government balanced budget assumes an absolute centrality - on the setting the Maastricht Treaty and later on, together with the theory of expansionary austerity, on the establishment and development of the GSP; [16]
2. the impact on public budgets of the financial and economic crisis, which led to their strong deterioration, because of the measures taken to save the banks and the effects of automatic stabilizers. The deterioration of public finances, in turn, has produced a crisis of confidence towards a number of EZ countries characterized by high debt and low growth, relatively to others with a lower debt and higher growth;
3. This dichotomisation between groups of countries has been accentuated by the unavailability, for single EMU members, of the currency and the monetary policies on as instruments for pursuing the economic adjustment. It was made clear that a number of countries could possibly fail in guaranteeing, in whatsoever circumstance, the payment of interest and the repayment of a debt denominated in a currency outside their control.

[16] The ordoliberalism, also when assuming the form of "social market economy", requires a balanced budget, because it denotes a correct functioning of the “State Order”, while a deficit would undermine other “orders” of the society (Di Maio 2015, 32) .

The Treaty (TFEU) precludes the possibility of bail out in the event of a crisis of a member state. This should imply that creditors should be “bailed in”, both if they are part of the official sector and the private sector. A private sector involvement (PSI) is not, however, for the moment, thought possible, because it would endanger the stability of financial markets and the endurance of euro. The debate is therefore developing along two main streams. On the one hand, mechanisms for the resolution of sovereign debt crises are designed on the assumption of imposing the full cost of restructuring over bondholders. These mechanisms should come into force in the longer term, when the link between banking systems and sovereign states will be dissolved. Moreover, in compliance with some ethical principle, they are deemed to apply only to newly issued debt. On the other side, solutions to break down the outstanding sovereign debts, without imposing any cost to the private sector have been studied. These solutions, which are based on complex mechanisms of securitization of future revenues of the member states (seigniorage and taxes), are of doubtful effectiveness and difficult to apply.

Meanwhile, in the bottleneck "no bail-out" and "no bail-in", the only viable exit has been seen in a slow process of debt reduction through the accumulation of primary surpluses. The cost of debt reduction is made to fall on the citizens-taxpayers, who receive less spending and pay more taxes for a long period of time.

As a matter of fact, however, things did not go, and do not go, exactly like that. In recent years, after the onset of the global financial crisis, more than once, in order to cope with situations of difficulty of EZ individual members, a combination of “a bit of a bail out” and “a bit of bail in” has been used, sometimes in indirect ways, some others more explicitly. This was done in a confused and disordered way, launching ambiguous signals, which have a high cost in terms of expectations.

How can the issue of sovereign states’ debt in Europe be addressed in the near future? The discriminating factor is growth. If it will succeed in restarting a significant and continuous economic growth, removing or overcoming the obstacles which fiscal consolidation policies create in the way, it will be possible to do without both bail out and the bail. In conditions of a vigorous and persistent growth, which once would have been considered "normal", public debt is not a problem. Instead, in the absence of (or with very small) growth, or at the occurrence of exceptional events, it is hard to believe that the problem of public debt can be addressed relying fully on bail in and excluding bail out, as it is now called for. It will be necessary, instead, as it was in these years, to resort to “a little bail in” and “a little bail out”. However, in order to avoid doing it in the messy way that have been used so far, it should be recommended to consider explicitly this perspective and regulate it within the framework of an overall review of the fiscal rules in Europe.

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