EUROPEAN COMMISSION

Brussels, dd.mm.2011

COM(2011)XXX

GREEN PAPER

Feasibility of introducing Stability Bonds

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1. RATIONALE AND PRE-CONDITIONS FOR STABILITY BONDS[1]

1.1. Background

This Green Paper has the objective to launch a broad public consultation on the concept of Stability Bonds, with all relevant stakeholders and interested parties, i.e. Member States, financial market operators, financial market industry associations, academics, within the EU and beyond, and the wider public as a basis for allowing the European Commission to identify the appropriate way forward on this concept.

The document assesses the feasibility of common issuance of sovereign bonds (hereafter "common issuance") among the Member States of the euro area.[2] Sovereign issuance in the euro area is currently conducted by Member States on a decentralised basis, using various issuance procedures. The introduction of commonly issued Stability Bonds would mean a pooling of sovereign issuance among the Member States and the sharing of associated revenue flows and debt-servicing costs. This would significantly alter the structure of the euro-area sovereign bond market, which is the largest segment in the euro-area financial market as a whole (see Annex 1 for details of euro-area sovereign bond markets).

The concept of common issuance was first discussed by Member States in the late 1990s, when the Giovannini Group (which has advised the Commission on capital-market developments related to the euro) published a report presenting a range of possible options for co-ordinating the issuance of euro-area sovereign debt.[3] In September 2008, interest in common issuance was revived among market participants, when the European Primary Dealers Association (EPDA) published a discussion paper "A Common European Government Bond"[4]. This paper confirmed that euro-area government bond markets remained highly fragmented almost 10 years after the introduction of the euro and discussed the pros and cons of common issuance. In 2009, the Commission services again discussed the issue of common issuance in the EMU@10 report.

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1 The public discussion and literature normally uses the term "Eurobonds". The Commission considers that the main feature of such an instrument would be enhanced financial stability in the euro area. Therefore, in line with President Barroso's State of the Union address on 28 September 2011, this Green Paper refers to "Stability Bonds".

2 In principle, common issuance could also extend to non-euro area Member States but would imply exchange rate risk. Several non-euro area Member States have already a large part of their obligations denominated in euro, so this should not represent a significant obstacle. All EU Member States might have an interest in joining the Stability Bond, especially if that would help reducing and securing their funding costs and generates positive effects on the economy through the internal market. From the point of view of the Stability Bond, the higher the number of Member States participates, the bigger are likely to be the positive effects, notably stemming from larger liquidity.

3 Giovannini Group: Report on co-ordinated issuance of public debt in the euro area (11/2000). http://ec.europa.eu/economy_finance/publications/giovannini/giovannini081100en.pdf .

4 See A European Primary Dealers Association Report Points to the Viability of a Common European Government Bond, http://www.sifma.org/news/news.aspx?id=7436.

The intensification of the euro-area sovereign debt crisis has triggered a wider debate on the feasibility of common issuance.[5] A significant number of political figures, market analysts and academics have promoted the idea of common issuance as a potentially powerful instrument to address liquidity constraints in several euro-area Member States. Against this background, the European Parliament requested the Commission to investigate the feasibility of common issuance in the context of adopting the legislative package on euro-area economic governance, underlining that the common issuance of Stability Bonds would also require a further move towards a common economic and fiscal policy.[6]

While common issuance has typically been regarded as a longer-term possibility, the more recent debate has focused on potential near-term benefits as a way to alleviate tension in the sovereign debt market. In this context, the introduction of Stability Bonds would not come at the end of a process of further economic and fiscal convergence, but would come in parallel with and foster the establishment and implementation of the necessary framework for such convergence. Such a parallel approach would require an immediate and decisive advance in the process of economic, financial and political integration within the euro area.

The Stability Bond would differ from existing jointly issued instruments. Stability Bonds would be an instrument designed for the day-to-day financing of euro-area general governments through common issuance. In this respect, they should be distinguished from other jointly issued bonds in the European Union and euro area, such as issuance to finance external assistance to Member States and third countries.[7] Accordingly, the scale of Stability Bond issuance would be much larger and more continuous than that involved in the existing forms of national or joint issuance.

Issuance of Stability Bonds could be centralised in a single agency or remain decentralised at the national level with tight co-ordination among the Member States. The distribution of revenue flows and debt-servicing costs linked to Stability Bonds would reflect the respective issuance shares of the Member States. Depending on the chosen

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5 See Annex 2 for an overview of analytical contributions to the Stability Bonds debate.

6 European Parliament resolution of 6 July 2011 on the financial, economic and social crisis: recommendations concerning the measures and initiatives to be taken ((2010/2242(INI) states:
" …13. *Calls on the Commission to carry out an investigation into a future system of Eurobonds, with a view to determining the conditions under which such a system would be beneficial to all participating Member States and to the euro area as a whole; points out that Eurobonds would offer a viable alternative to the US dollar bond market, and that they could foster integration of the European sovereign debt market, lower borrowing costs, increase liquidity, budgetary discipline and compliance with the Stability and Growth Pact (SGP), promote coordinated structural reforms, and make capital markets more stable, which will foster the idea of the euro as a global 'safe haven'; recalls that the common issuance of Eurobonds requires a further move towards a common economic and fiscal policy;*
14. Stresses, therefore, that when Eurobonds are to be issued, their issuance should be limited to a debt ratio of 60% of GDP under joint and several liability as senior sovereign debt, and should be linked to incentives to reduce sovereign debt to that level; suggests that the overarching aim of Eurobonds should be to reduce sovereign debt and to avoid moral hazard and prevent speculation against the euro; notes that access to such Eurobonds would require agreement on, and implementation of, measurable programmes of debt reduction;"

7 E.g. bonds issued by the Commission under the Balance of Payments Facility/EFSM and bonds issued by the EFSF or issuance to finance large-scale infrastructure projects with a cross-country dimension (e.g. project bonds to be possibly issued by the Commission). The various types of joint issuance and other instruments similar to Stability Bonds are discussed in Annex 3.

approach to issuing Stability Bonds, Member States could accept joint-and-several liability for all or part of the associated debt-servicing costs, implying a corresponding pooling of credit risk.

Many of the implications of Stability Bonds go well beyond the technical domain and involve issues relating to national sovereignty and the process of economic and political integration. These issues include reinforced economic policy coordination and governance and, under some options, the need for Treaty changes. The more extensively credit risk would be pooled among sovereigns, the lower would be market volatility but also market discipline on any individual sovereign. Thus fiscal stability would have to rely more strongly on discipline provided by political processes. Equally, some of the pre-conditions for the success of Stability Bonds, such as a high degree of political stability and predictability or the scope of backing by monetary authorities, go well beyond the more technical domain.

Any type of Stability Bond would have to be accompanied by a substantially reinforced fiscal surveillance and policy coordination as an essential counterpart, so as to avoid moral hazard and ensure sustainable public finances. This would necessarily have implications for fiscal sovereignty, which calls for a substantive debate in euro area member states.

As such issues require in-depth consideration, this paper has been adopted by the Commission so as to launch a necessary process of political debate and public consultation on the feasibility of and the pre-conditions for introducing Stability Bonds.

1.2. Rationale

The debate on common issuance has evolved considerably since the launch of the euro. Initially, the rationale for common issuance focused mainly on the benefits of enhanced market efficiency through enhanced liquidity in euro-area sovereign bond market and the wider euro-area financial system. More recently, in the context of the ongoing sovereign crisis, the focus of debate has shifted toward crisis management and stability aspects. Against this background, the main benefits of common issuance can be identified as:

Managing the current crisis and preventing future sovereign debt crises

The prospect of Stability Bonds could potentially quickly alleviate the current sovereign debt crisis, as the high-yield Member States could benefit from the stronger creditworthiness of the low-yield Member States. Even if the introduction of Stability Bonds could take some time (see Section 2), prior agreement on common issuance could have an immediate impact on market expectations and thereby lower average and marginal funding costs for those Member States currently facing funding pressures. However, for any such effect to be durable, a roadmap towards common bonds would have to be accompanied by parallel commitments to stronger economic governance, which would guarantee that the necessary budgetary and structural adjustment to assure sustainability of public finances would be undertaken.

Reinforcing financial stability in the euro area

Stability Bonds would make the euro-area financial system more resilient to future adverse shocks and so reinforce financial stability. Stability Bonds would provide all

participating Member States with more secure access to refinancing, preventing a sudden loss of market access due to unwarranted risk aversion and/or herd behaviour among investors. Accordingly, Stability Bonds would help to smooth market volatility and reduce or eliminate the need for costly support and rescue measures for Member States temporarily excluded from market financing. The positive effects of such bonds are dependent on managing the potential disincentives for fiscal discipline. This aspect will be discussed more thoroughly in Section 1.3 and Section 3.

The euro-area banking system would benefit from the availability of Stability Bonds. Banks typically hold large amounts of sovereign bonds, as low-risk, low-volatility and liquid investments. Sovereign bonds also serve as liquidity buffers, because they can be sold at relatively stable prices or can be used as collateral in refinancing operations. However, a significant home bias is evident in banks' holdings of sovereign debt, creating an important link between their balance sheets and the balance sheet of the domestic sovereign. If the fiscal position of the domestic sovereign deteriorates substantially, the quality of available collateral to the domestic banking system is inevitably compromised, thereby exposing banks to refinancing risk both in the interbank market and in accessing Eurosystem facilities. Stability Bonds would provide a source of more robust collateral for all banks in the euro area, reducing their vulnerability to deteriorating credit ratings of individual Member States. Similarly, other institutional investors (e.g. life insurance companies and pension funds), which tend to hold a relatively high share of domestic sovereign bonds, would benefit from a more homogenous and robust asset in the form of a Stability Bond.

Facilitating transmission of monetary policy

Stability Bonds would facilitate the transmission of euro-area monetary policy. The sovereign debt crisis has impaired the transmission channel of monetary policy, as government bond yields have diverged sharply in highly volatile markets. In some extreme cases, the functioning of markets has been impaired and the ECB has intervened via the Securities Market Programme. Stability Bonds would create a larger pool of safe and liquid assets. This would help in ensuring that the monetary conditions set by the ECB would pass smoothly and consistently through the sovereign bond market to the borrowing costs of enterprises and households and ultimately into aggregate demand.

Improving market efficiency

Stability Bonds would promote efficiency in the euro-area sovereign bond market and in the broader euro-area financial system. Stability Bond issuance would offer the possibility of a large and highly liquid market, with a single benchmark yield in contrast to the current situation of many country-specific benchmarks. The liquidity and high credit quality of the Stability Bond market would deliver low benchmark yields, reflecting correspondingly low credit risk and liquidity premiums (see Box 1). A single set of “risk free” Stability Bond benchmark yields across the maturity spectrum would help to develop the bond market more broadly, stimulating issuance by non-sovereign issuers, e.g. corporations, municipalities, and financial firms. The availability of a liquid euro-area benchmark would also facilitate the functioning of many euro-denominated derivatives markets. The introduction of Stability Bonds could be a further catalyst in integrating European securities settlement, in parallel with the planned introduction of the ECB's Target2 Securities (T2S) pan-European common settlement platform and possible further regulatory action at EU level. In these various ways, the introduction of Stability Bonds could lead to lower financing costs for both the public

sector and the private sector in the euro area and thereby underpin the longer-term growth potential of the economy.

Box 1: The expected yield of Stability Bonds – the empirical support

The introduction of Stability Bonds should enhance liquidity in euro-area government bond markets, thereby reducing the liquidity premium investors implicitly charge for holding government bonds. This box presents an attempt to quantify how large the cost savings through a lower liquidity premium could be. A second component of the expected yield on Stability Bonds, namely the likely credit risk premium has proven more controversial. Both the liquidity and credit premiums for a Stability Bond would crucially depend on the options chosen for the design and guarantee structure of such bonds.

Several empirical analyses compared the yield of hypothetical commonly-issued bonds with the average yield of existing bonds. These analyses assume that there is neither a decline in the liquidity premium nor any enhancement in the credit risk by the common issuance beyond the average of the ratings of Member States. Carstensen (2011) estimated that the yield on common Bonds, if simply a weighted average of interest rates of Member States, would be 2 percentage points above the German 10-year Bund. Another estimate (Assmann, Boysen-Hogrefe (2011), as cited by Frankfurter Allgemeine Zeitung (2011)) concluded that the yield difference to German bunds could be 0.5 to 0.6 of a percentage point. The underlying reasoning is that fiscal variables are key determinants of sovereign bond spreads. In fiscal terms, the euro-area aggregate would be comparable to France; therefore the yield on common bonds would be broadly equal to that on French bonds. An analysis by J.P Morgan (2011), using a comparable approach, yields a similar range of around 0.5 to 0.6 of a percentage point. A further analysis along these lines by the French bank NATIXIS (2011) suggests that common bonds could be priced about 20 basis points above currently AAA-rated bonds. Favero and Missale (2010) claim that US yields, adjusted for the exchange rate premium, are a good benchmark for yields on common bonds, because such bonds would aim to make the euro-area bond markets similar to the US market in terms of credit risk and liquidity. They find that in the years before the financial crisis the yield disadvantage of German over US government bonds was around 40 basis points, which would then represent the liquidity gains obtained from issuing common bonds under the same conditions as US bonds.

In order to provide an estimate of the attainable gains in the liquidity premium, the Commission has conducted a statistical analysis of each issuance of sovereign bonds in the euro area after 1999. The size of the issuance is used as an approximation (as it is the most broadly available indicator even if it might underestimate the potential gain in liquidity premia) of how liquid a bond issuance is, and the coefficient in a regression determines the attainable gains from issuing bonds in higher volumes.[8] A first model is estimated using data on AAA-rated euro-area Member States (labelled "AAA" in the table), and a second model is estimated using data on all available euro-area Member States (labelled "AA"). The second model also controls for the rating of each issuance. It emerges that all coefficients are significant at conventional levels, and between 70 and 80% of the variation is explained by the estimation.

[8] The issuance sizes as recorded in Dealogic have been adjusted to incorporate the size of adjacent issuances with similar maturity and settlement date. To adjust for differences in time-dependent market conditions, control variables are introduced for the impact of the level of the interest rate (the 2-year swap rate) and of the term structure (the difference between the 10-year and the 2-year swap rates) prevailing at the time of each issuance.

Table: Model estimates and expected change in yield due to lower liquidity premium

	Historical average 1999-2011			*2011 market conditions*		
	DE	AAA	AA	DE	AAA	AA
Yield (%) – model based	3.68	3.63	3.87	1.92	2.43	2.63
Yield change with US market size	-0.07	-0.09	-0.17	-0.07	-0.17	-0.17

To obtain the gain in the liquidity premium, the coefficients from the model estimate were used to simulate the potential fall in yields of bonds that were issued in the average US issuance size rather than the average euro-area issuance volume. Hence, the US's issuance size serves as a proxy for how liquid a Stability Bond market might become. In a first set of calculation, the liquidity advantage was derived from the average historical "portfolio" yield since 1999. For comparison, the same calculations were made assuming the market conditions of summer 2011.

The table's second row indicates that the yield gain due to higher issuing volume would be in the range of 10 to 20 basis points for the euro area, depending on the credit rating achieved, but rather independent on whether the historical or recent market conditions were used. The corresponding gain in the yield for Germany would be around 7 basis points. The simulations demonstrate that the expected gain in the liquidity premium is rather limited and decreases for Member States that already benefit from the highest rating.

While it is obvious that the Members States currently facing high yields would benefit from both the pooling of the credit risk and the improved liquidity of the common bonds, the current low-yield Member States could face higher yields in the absence of any improvement in the credit risk of the current high-yield issuers. In principle, compensatory side payments could redistribute the gains associated with the liquidity premium, but in the absence of better governance the overall credit quality of the euro area debt could in fact deteriorate as a result of weaker market discipline to the extent that the current low-yield Member States would face increased funding costs.

Enhancing the role of the euro in the global financial system

Stability Bonds would facilitate portfolio investment in the euro and foster a more balanced global financial system. The US Treasury market and the total euro-area sovereign bond market are comparable in size, but fragmentation in euro-denominated issuance means that much larger volumes of Treasury bonds are available than for any of the individual national issuers in the euro area. On average since 1999, the issuance size of 10-year US Treasury bonds has been almost twice the issuing size of the Bund and even larger than bonds issued by any other EU Member State. According to available data, trading volumes in the US Treasury cash market are also a multiple of those on the corresponding euro-area market, where liquidity has migrated to the derivatives segment. High liquidity is one of the factors contributing to the prominent and privileged role of US Treasuries in the global financial system (backed by the US dollar as the sole international reserve currency), thereby attracting institutional investors. Accordingly, the larger issuance volumes and more liquid secondary markets implied by Stability Bond issuance would strengthen the position of the euro as an international reserve currency.

1.3. Preconditions

While Stability Bonds would provide substantial benefits in terms of financial stability and economic efficiency, it would be essential to address potential downsides. To this end, important economic, legal and technical preconditions would need to be met. These pre-

conditions, which could imply Treaty changes and substantial adjustments in the institutional design of EMU and the European Union, are discussed below.

Limiting moral hazard

Stability Bonds must not lead to a reduction in budgetary discipline among euro-area Member States. A notable feature of the period since the launch of the euro has been inconsistency in market discipline of budgetary policy in the participating Member States. The high degree of convergence in euro-area bond yields during the first decade of the euro was not, in retrospect, justified by the budgetary performance of the Member States. The correction since 2009 has been abrupt, with possibly some degree of overshooting. Despite this inconsistency, the more recent experience confirms that markets can discipline national budgetary policies in the euro area. With some forms of Stability Bonds, such discipline would be reduced or lost altogether as euro-area Member States would pool credit risk for some or all of their public debt, implying a risk of moral hazard. Moral hazard inherent in common issuance arises since the credit risk stemming from individual lack of fiscal discipline would be shared by all participants.

As the issuance of Stability Bonds may weaken market discipline, substantial changes in the framework for economic governance in the euro area would be required. Additional safeguards to assure sustainable public finances would be warranted. These safeguards would need to focus not only on budgetary discipline but also on economic competitiveness (see Section 3). While the adoption of the new economic governance package already provides a significant safeguard to be further reinforced by new regulations based on Article 136[9], there may be a need to go still further in the context of Stability Bonds – notably if a pooling of credit risk was to be involved. If Stability Bonds were to be seen as a means to circumvent market discipline, their acceptability among Member States and investors would be put in doubt.

Ensuring high credit quality and that all Member States benefit from Stability Bonds

Stability Bonds would need to have high credit quality to be accepted by investors. Stability Bonds should be designed and issued such that investors consider them a very safe investment. Consequently, the acceptance and success of Stability Bonds would greatly benefit from the highest rating possible. An inferior rating could have a negative impact on its pricing (higher yield than otherwise) and on investors' willingness to absorb sufficiently large amounts of issuance. This would particularly be the case if Member States' national AAA issuance would continue and thereby co-exist and compete with Stability Bonds. High credit quality would also be needed to establish Stability Bonds as an international benchmark and to underpin the development and efficient functioning of related futures and options markets.[10] In this context, the construction of Stability Bonds would need to be sufficiently

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9 *Proposal for a Regulation of the European Parliament and of the Council on common provisions for monitoring and assessing draft budgetary plans and ensuring the correction of excessive deficit of the Member States in the euro area; Proposal for a Regulation of the European Parliament and of the Council on common provisions for monitoring and assessing draft budgetary plans and ensuring the correction of excessive deficit of the Member States in the euro area.*

10 The experience of rating the EFSF bonds has showed that a rating of the bond superior to the average guarantees made by participating Member States was accomplished by different tools such as holding cash buffers, loss-absorbing capital and over-guaranteeing the issuance size. While these elements have been

transparent to allow investors to price the underlying guarantees. Otherwise, there is a risk that investors would be sceptical of the new instrument and yields would be considerably higher than the present yields for the more credit-worthy Member States.

Achieving a high credit quality will also be important to ensure the acceptance of Stability Bonds by all euro-area Member States. One key issue is how risks and gains are distributed across Member States. In some forms, Stability Bonds would mean that Member States with a currently below-average credit standing could obtain lower financing costs, while Member States that already enjoy a high credit rating may even incur net losses, if the effect of the pooling of risk dominated the positive liquidity effects. Accordingly, support for Stability Bonds among those Member States already enjoying AAA ratings would require an assurance of a correspondingly high credit quality for the new instrument so that the financing costs of their debt would not increase. As explained, this again would rest on a successful reduction of moral hazard. The acceptability of Stability Bonds might be further assured by a mechanism to redistribute some of the funding advantages between the higher-and lower-rated Member States (see Box 2).

The credit rating for Stability Bonds would primarily depend on the credit quality of the participating Member States and the underlying guarantee structure. [11]

- With *several (not joint) guarantees*, each guaranteeing Member State would be liable for its share of liabilities under the Stability Bond according to a specific contribution key.[12] Provided that Member States would continue to obtain specific ratings, a downgrade of a large Member State would be very likely to result in a corresponding downgrade of the Stability Bond, although this would not necessarily have an impact on the rating of the other Member States. In present circumstances with only six AAA euro-area Member States, a Stability Bond with this guarantee structure would not be assigned an AAA credit rating and could even be rated equivalently with the lowest-rated Member State.

- With *several (not joint) guarantees enhanced by seniority and collateral*, each guaranteeing Member State would again remain liable for its own share of Stability Bond issuance. However, to ensure that Stability Bonds would always be repaid, even in case of default, a number of credit enhancements could be considered by the Member States. First, senior status could be applied to Stability Bond issuance. Second, Stability Bonds could be partially collateralised (e.g. using cash, gold, shares of public companies etc.). Third, specific revenue streams could be earmarked to cover debt servicing costs related to Stability Bonds. The result would be that the Stability Bonds would achieve an AAA rating, although the ratings on the national bonds of less credit-worthy Member States would be likely to experience a relative deterioration.

- With *joint and several guarantees*, each guaranteeing Member State would be liable not only for its own share of Stability Bond issuance but also for the share of any other Member State failing to honour its obligations.[13]. Even under this guarantee structure,

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complex to manage in the case of the EFSF, they may prove useful in reinforcing the credit rating of the Stability Bond.

11 In this section, the terms *several guarantee* and *joint and several guarantee* are used in an economic sense that may not be identical to their legal definitions.

12 Such as an EU budget or ECB capital key

13 However, in such circumstances, participating Member States would have a claim on the defaulting Member State.

Stability Bonds may not obtain or maintain an AAA rating if a limited number of AAA-rated Member States would be required to guarantee very large liabilities of other lower-rated Member States. There is also a non-negligible risk that a cascade of rating downgrades could be set in motion, e.g. a downgrading of a larger AAA-rated Member State could result in a downgrading of the Stability Bond, which could in turn feedback negatively to the credit ratings of the other participating Member States due to their contingent liability for all Stability Bond issuance. Accordingly, appropriate safeguards would be essential to assure budgetary discipline among the participating Member States via a strong economic governance framework (and possibly seniority of Stability Bonds over national bonds under an option where these would continue to exist).

Box 2: Possible redistribution of funding advantages between Member States

The risk of moral hazard associated with Stability Bond issuance with joint guarantees might be addressed by a mechanism to redistribute some of the funding advantages of Stability Bond issuance between the higher- and lower-rated Member States. Such a mechanism could make the issuance of Stability Bonds into a win-win proposition for all euro-area Member States. A stylised example using two Member States can be used to demonstrate:

The government debt of both Member States amounts to about EUR 2 billion, but Member State A pays a yield of 2%, while Member State B pays a yield of 5% on national issuance with 5-year maturity. Stability Bond issuance would finance both Member States fully, with maturity of 5 years and an interest rate of 2%). The distribution of Stability Bond issuance would be 50% for each Member State.

Part of the funding advantage that Member State B would enjoy from Stability Bond issuance could be redistributed to Member State A. For example, a 100bps discount for Member State A could be financed from the 300 bps premium for Member State B. Accordingly, the Stability Bond could fund Member State A at a yield of 1% and fund Member State B at a yield of 3%. Both Member States would have lower funding costs relative to national issuance.

Needless to say, the mechanism for internal distribution of the benefits from Stability Issuance would need to be formulated but would be linked to relative budgetary performance in the context of the euro-area economic governance framework.

Ensuring consistency with the EU Treaty

Consistency with the EU Treaty would be essential to ensure the successful introduction of the Stability Bond. Firstly, Stability Bonds must not be in breach of the Treaty prohibition on the "bailing out" of Member States. The compatibility of Stability Bonds with the current Treaty framework depends on the specific form chosen. Some options could require changes in the relevant provisions of the Treaty. Article 125 of the Treaty on the functioning of the European Union (TFEU) prohibits Member States from assuming liabilities of another Member State.

Issuance of Stability Bonds under joint and several guarantees would a priori lead to a situation where the prohibition on bailing out would be breached. In such a situation, a Member State would indeed be held liable irrespective of its 'regular' contributing key, should another Member State be unable to honour its financial commitments. In this case, an amendment to the Treaty would be necessary. This could be made under the simplified procedure if a euro area common debt management office were constructed under an inter-governmental framework, but would most likely require the use of the ordinary procedure if it

were placed directly under EU law since it would extend the competences of the EU. Unless a specific basis is established in the Treaty, an EU-law based approach would probably require the use of Article 352 TFEU, which implies a unanimous vote of the Council and the consent of the European Parliament. The issuance of Stability Bonds and the tighter economic and fiscal coordination needed for ensuring its success would also most likely require significant changes to national law in a number of Member States[14].

Issuance of Stability Bonds under several but not joint guarantees would be possible within the existing Treaty provisions. For example**,** increasing substantially the authorised lending volume of the ESM and changing the lending conditions with a view to allowing it to on-lend the amounts borrowed on the markets to all euro-area Member States could be constructed in a way compatible with Article 125 TFEU, provided the pro-rata nature of the contributing key attached to the ESM remains unchanged. The same reasoning would apply to issuances of a possible common debt management office, whose liabilities would remain limited to a strictly pro-rata basis.

The Treaty would also need to be changed if a significantly more intrusive euro-area economic governance framework was to be envisaged. Depending on the specific characteristics of Stability Bonds, fiscal and economic governance and surveillance in participating Member States would have to be reinforced to avoid the emergence of moral hazard. Further qualitative changes in governance beyond the proposals included in the 23 November package will probably require changes in the Treaty. Section 3 discusses such options of reinforced fiscal governance in more depth.

2. OPTIONS FOR ISSUANCE OF STABILITY BONDS

Many possible options for issuance of Stability Bonds have been proposed, particularly since the onset of the euro-area sovereign crisis. However, these options can be generally categorised under three broad approaches, based on the degree of substitution of national issuance (full or partial) and the nature of the underlying guarantee (joint and several or several) implied. The three broad approaches are[15]:

1. the full substitution of Stability Bond issuance for national issuance, with joint and several guarantees;
2. the partial substitution of Stability Bond issuance for national issuance, with joint and several guarantees; and
3. the partial substitution of Stability Bond issuance for national issuance, with several but not joint guarantees.

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[14] For example, the German Constitutional Court ruling of 7 September 2011 prohibits the German legislative body to establish a permanent mechanism, "*which would result in an assumption of liability for other Member States' voluntary decisions, especially if they have consequences whose impact is difficult to calculate.*" It also requires that also in a system of intergovernmental governance, the Parliament must remain in control of fundamental budget policy decisions.

[15] A fourth approach involving full substitution of Stability Bonds and several but not joint guarantees would also be possible but is not considered, as it would not be materially different from the existing issuance arrangements. In addition, hybrid cases could be conceived, for example several guarantees on debt obligations coupled with a limited joint guarantee to cover short-term liquidity gaps.

In this section, each of the three approaches is assessed in terms of the benefits and preconditions outlined in Section 1.

2.1. Approach No. 1: Full substitution of Stability Bond issuance for national issuance, with joint and several guarantees

Under this approach, euro-area government financing would be fully covered by the issuance of Stability Bonds with national issuance discontinued. While Member States could issue Stability Bonds on a decentralised basis via a coordinated procedure, a more efficient arrangement would imply the creation of a single euro-area debt agency.[16] This centralised agency would issue Stability Bonds in the market and distribute the proceeds to Member States based on their respective financing needs. On the same basis, the agency would service Stability Bonds by gathering interest and principal payments from the Member States. The Stability Bonds would be issued under joint and several guarantees provided by all euro-area Member States, implying a pooling of their credit risk. Given the joint-and-several nature of guarantees, the credit rating of the larger euro-area Member States would most likely dominate in determining the Stability Bond rating, suggesting that a Stability Bond issued today could be expected to have a high credit rating. Nevertheless, the design of the cross-guarantees embedded in Stability Bonds and the implications for credit rating and yields would need to be more thoroughly analysed.

This approach would be most effective in delivering the benefits of Stability Bond issuance. The full substitution of Stability Bond issuance for national issuance would assure full refinancing for all Member States irrespective of the condition of their national public finances. In this way, the severe liquidity constraints currently experienced by some Member States could be overcome and the recurrence of such constraints would be avoided in the future. This approach would also create a very large and homogenous market for Stability Bonds, with important advantages in terms of liquidity and reduced liquidity risk premia. The new Stability Bonds would provide a common euro-area benchmark bond and so offer a more efficient reference framework for the pricing of risk throughout the euro-area financial system. By assuring high quality government-related collateral for financial institutions in all Member States, it would maximise the benefits of common issuance in improving the resilience of the euro-area financial system and in improving monetary-policy transmission. The Stability Bond under this approach would also provide the global financial system with a second safe-haven market of a size and liquidity comparable with the US Treasury market and so would be most effective in promoting the international role of the euro.

At the same time, this approach would involve the greatest risk of moral hazard. Member States could effectively free ride on the discipline of other Member States, without any implications for their financing costs. Accordingly, this approach would need to be accompanied by a very robust framework for delivering budgetary discipline and economic competitiveness at the national level. Such a framework would require a significant further step in economic, financial and political integration compared with the present situation. Without this framework, however, it is unlikely that this ambitious approach to Stability Bond issuance would result in an outcome that would be acceptable to Member States and investors. Given the joint-and-several guarantees for the Stability Bond and the robustness

[16] See section 4 for a review of the advantages and disadvantages of centralised and decentralised issuance.

required in the underlying framework for budgetary discipline and economic competitiveness, this approach to Stability Bond issuance would almost certainly require Treaty changes.

Under this approach, the perimeter of government debt to be issued via Stability Bonds would need to be defined. In several Member States, bonds are not only issued by central governments but also by regional or municipal governments.[17] In principle, one might opt for including sub-national issuance. The obvious advantage would be that the potential benefits in terms of market stability, liquidity and integration would be broadened. It would also be consistent with the EU approach to budgetary surveillance, which covers the entire general government debt and deficits. On the other hand, pooling issuance only of central governments might deliver a more transparent and secure arrangement. Central government data are typically more easily accessed, which is not always the case for local authorities. Moreover, the issuance would cover only deficits fully controlled by central governments. From a purely market point of view, such Stability Bonds would replace only widely known central government bonds, which would facilitate the assessment and valuation of the new Stability Bonds.[18]

The process for phasing-in under this approach could be organised in different ways depending on the desired pace of introduction. Under an accelerated phasing-in, new issuances would be entirely in the form of Stability Bonds and outstanding government bonds could be converted into new Stability Bonds, i.e. in form of a switch of a certain amount of national government bonds in exchange for new Stability Bonds. The main advantage of this option would be the almost immediate creation of a liquid market with a complete benchmark yield curve. The buy-back of legacy bonds could also alleviate the current acute financing problems of the Member States with high debt and high interest rates. However, the operation may be complicated and would require careful calibration of the conversion rate to minimise market disruption. An alternative would be a more gradual scheme, i.e. full, or even only partial, new gross issuance for each Member States in Stability Bonds while outstanding euro-area government bonds would remain in circulation on the secondary market. This would allow the market to gradually become accustomed to the new instrument and develop analytical/pricing tools, thereby posing less risk of market disruption. However, in this variant, building a complete Stability Bond market would take several years (depending on maturities of outstanding bonds), delaying possible benefits. As for the outstanding legacy bonds, this segment would be gradually declining, as being replaced by Stability Bonds and newly issued national bonds. Hence, the overall liquidity of that segment would decline over time and accordingly, the liquidity premium on legacy bonds might gradually rise.

Due to the need for changes to the Treaty the implementation of this approach might take a considerable amount of time.

2.2. Approach No. 2: Partial substitution of national issuance with Stability Bond issuance with joint and several guarantees

Under this approach, Stability Bond issuance would be underpinned by joint and several guarantees, but would replace only a limited portion of national issuance. The

[17] This is the case in particular for Germany and to a lesser extent for Spain and France.

[18] This narrow coverage of Stability Bonds would imply that Member States would have to commit not to issue own national, or other sovereign, bonds, including their sub-federal entities if these are included in the system of joint issuance.

portion of issuance not in Stability Bonds would remain under respective national guarantees. This approach to common issuance has become known as the "blue-red approach"[19]. Accordingly, the euro area sovereign bond market would consist of two distinct parts:

- *Stability Bonds* (or "blue bonds"): The issuance of Stability Bonds would occur only up to certain predefined limits and thereby not necessarily covering the full refinancing needs of all Member States. These bonds would benefit from a joint-and-several guarantee and would imply a uniform refinancing rate for all Member States.[20]

- *National government bonds* ("red bonds"). The remainder of the issuance required to finance Member State budgets would be issued at the national level under national guarantees. In consequence, national bonds would, at least de facto, be junior to Stability Bonds because of the latter's coverage by joint-and-several guarantees[21]. The scale of national issuance by each Member State would depend on the agreed scale of common issuance of Stability Bonds and its overall refinancing needs. Depending on the size of these residual national bond markets and issuances and the country's credit quality, these national bonds would have country-specific liquidity and credit features and accordingly different market yields, also since most sovereign credit risk would be concentrated in the national bonds, amplifying the credit risk.[22] The intensified market pressures on national issuance would provide market discipline.

A key issue in this approach would be the specific criteria for determining the relative proportions of Stability Bond and national issuance. The main options would be:

- *A simple rule-based system:* For example, each Member State could be entitled to an amount of Stability Bonds equal to a specified percentage of its GDP, perhaps reflecting the Treaty criterion of 60%. An important dimension to consider is how much risk would be concentrated on the national (and junior) part, this being dependent on the size of the common issuance (the higher the share of Stability Bond issuance, the more risk is concentrated on the residual national issuance). To avoid excessive credit risk in national issuance, while still delivering liquidity benefits through common issuance, it might be appropriate to set the ceiling at a more prudent level.

- *A more flexible system linked to policy compliance*: The maximum amount of a Member State's Stability Bond issuance could be fixed as above, but the ceiling at any point in time would be linked to the Member State's compliance with rules and recommendations under the euro-area governance framework. Non-compliance could be sanctioned by a (possibly automatic) lowering of the respective Stability Bond debt ceiling for the Member State concerned (see also Section 3). This system would also

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19 See Delpla, J. and von Weizsäcker, J. (2010). They proposed a debt ceiling of 60% of GDP, motivated by the Maastricht criteria.

20 As in Approach No. 1, Stability Bond issuance could be conducted on a decentralised basis, but would probably be more efficiently managed by a central debt management agency.

21 Such a subordinate status of national bonds could only apply to newly issued national bonds, i.e. national bonds issued after the introduction of Stability Bonds. Conversely, outstanding "old" or "legacy" national bonds would have to enjoy the same status as Stability Bonds, because a change of their status would, technically, amount to a default.

22 Delpla and von Weizsäcker argue that, due to the high default risk, red debt should largely be kept out of the banking system, by becoming no longer eligible for ECB refinancing operations and subject to painful capital requirements in the banking system.

serve as a quasi-automatic stabilizer of the credit quality of the Stability Bonds, as the respective share of fiscally underperforming Member States would be reduced.

The credibility of the ceiling for the Stability Bond issuance would be a key consideration. Once the blue bond allocation is exhausted, the financing costs for the Member State could increase substantially. This could result in political pressures to increase the ceiling. Unless there are strong safeguards against such pressures, anticipation of a "soft" ceiling could largely eliminate the disciplining effects of the blue-red approach. Therefore, irrespective of the criteria established for determining the ceiling for Stability Bond issuance, it would be essential that that this ceiling should be maintained and not adjusted on an arbitrary basis, e.g. in response to political pressure.

This approach to Stability Bond issuance is less ambitious than the full-issuance approach above and so delivers less in terms of economic and financial benefits. Due to their seniority over the national bonds and guarantee structure, the Stability Bonds would pose a very low credit risk, the latter reflected in high credit ratings (i.e. AAA). The yield on the Stability Bonds would therefore, be comparable with yields on existing AAA government bond in the euro area. In consequence, there would be corresponding benefits in terms of euro-area financial stability, monetary policy transmission and the international role of the euro, although these would be less than under the more ambitious approach of full substitution of Stability Bond issuance for national issuance. As the build-up phase in Stability Bond issuance toward the agreed ceiling would most likely take several years, all Member States could, during the start-up phase, have very broad access to financial markets via Stability Bonds. This would overcome possible liquidity constraints faced by some Member States but for that period give rise to the same moral hazard implications as discussed in Section 2.1 under full issuance. Given that a return to national issuance for these latter Member States would be required when the Stability Bond ceiling would be reached, they would need to provide reassurance that during this time they would undertake the budgetary adjustments and structural reforms necessary to reassure investors and so maintain access to markets after the introductory period. The yields on the newly issued national bonds would, however, rise due to their junior status. Ultimately, assuming a reasonably high proportion of Stability Bond issuance has been reached, the market would be expected to be liquid, but less liquid than if all issuances were in Stability Bonds as the residual national bonds would also hold a certain market share.

On the other hand, the preconditions for Stability Bond issuance would be somewhat less binding under this approach. Establishing a ceiling for Stability Bond issuance would help to reduce moral hazard by maintaining a degree of market discipline through the residual national issuance. However, the relationship between moral hazard, market discipline, and contagion risk in determining the appropriate Stability Bond ceiling is not straightforward. A relatively low Stability Bond ceiling (implying a large amount of residual national issuance) would limit moral hazard but could leave Member States with existing high debt levels vulnerable to the risk of catastrophic default on their national issuance. Such a catastrophic default would carry contagion risk for the euro area as a whole. A relatively high Stability Bond ceiling (implying a small amount of residual national issuance) would imply a greater risk of moral hazard but would still allow the possibility of default in a Member State with less catastrophic effects and less contagion risk for euro area as a whole. A robust framework for maintaining fiscal discipline and economic competitiveness at national level would still be required to underpin the Stability Bond issuance, although the market discipline provided via

the retention of national issuance might imply a less dramatic transfer of sovereignty than under the approach of full Stability Bond issuance. Meanwhile, the choice of ceiling would also determine the likely credit quality of the Stability Bond. A relatively low ceiling would underpin the credit quality of Stability Bonds by limiting the amount of debt covered by the stronger joint and several guarantees.[23] The joint-and-several guarantee for the Stability Bond would almost certainly require Treaty changes.

The process for phasing-in under this approach could again be organised in different ways depending on the desired pace of introduction. Under an accelerated phasing-in, a certain share of outstanding euro-area government bonds would be replaced by Stability Bonds at a pre-specified date using pre-specified factors. This would rapidly establish a critical mass of outstanding Stability Bonds and a sufficiently liquid market with a complete benchmark yield curve. However, it could imply that most Member States reach the ceilings at the moment of the switch and that they would have to continue tapping capital markets with national bonds. Under current market conditions, this might constitute a drawback for some Member States. Under a more gradual phasing-in, all (or almost all) new gross issuance for Member States would be in Stability Bonds until the Stability Bond issuance target ceiling is reached. Since for several years only (or nearly only) Stability Bonds would be issued, this approach would help to ease market pressure and give vulnerable Member States time for the reforms to take effect. However, specific challenges emerge for the transition period, as highly indebted countries typically have larger and more frequent rollovers. Unless other arrangements are agreed, their debt replacement with Stability Bonds up to the ceiling will be more rapid than the average, while for countries with debt below the ceiling, it would take longer. In consequence, the individual risk, which a possible "joint-and-several" guarantee is covering, would be skewed to the higher side in the transition phase, while on the other side the liquidity effect, which should compensate the AAA countries, would still be small. This specificity may need to be reflected in the governance arrangements. For example, an alternative could be to set annual predefined ceilings, rising slowly from zero to the desired long-term value.

Due to the need for changes to the Treaty, the implementation of this approach might also take, as for Approach No 1, some considerable time, although the lesser degree of necessary changes to economic and fiscal governance, due to the partial reliance of markets for signalling and disciplining, might make the implementation process less complex and time-consuming.

[23] The proposal by Bruegel sets the ceiling at 60% of GDP, using the Maastricht criterion as reference but other proposals with even lower ceilings have been made. Indeed, it has been argued that a sufficiently low ceiling virtually guarantees zero default risk on Eurobonds. A standard assumption in the pricing of default risks is that in the case of default 40% of the debt can be recovered. Applying this consideration to sovereign debt, a ceiling below the recovery value would imply that the debt issued under the common scheme will be served under any condition.

Box 3: Debt redemption fund and safe bonds

As a specific example of the partial issuance approach, the German Council of Economic Experts (GCEE) presented in their Annual Report 2011/12[24] a proposal for safe bonds that is a part of a euro-area wide debt reduction strategy aimed at bringing the level of government indebtedness back below the 60% ceiling as put in the Maastricht Treaty.

One of the pillars of the strategy is a so-called debt redemption fund. The redemption fund would pool government debt exceeding 60% of individual countries' GDP of euro area Member States. It would be based on joint liability. Each participating country would, under a defined a consolidation path, be obliged to autonomously redeem the transferred debt over a period of 20 to 25 years. The joint liability during the repayment phase means that safe bonds would thereby be created. In practice, the redemption fund would issue safe bonds and the proceeds would be used by participating countries to cover their pre-agreed current financing needs for the redemption of outstanding bonds and new borrowing. Therefore, the debt transfer would occur gradually over around five years. Member States with debt above 60% of GDP would therefore not have to seek financing on the market during the roll-in phase as long as the pre-agreed debt reduction path was adhered to. After the roll-in phase, the outstanding debt levels in the euro area would comprise: (i) national debt up to 60% of a country's GDP, and (ii) debt transferred to the redemption fund amounting to the remainder of the debt at the time of transfer. Open questions remain, for example on the fund's risk, which would be skewed due to the over-representation of high-risk debt, and the impact on the de facto seniority from collateralisation of the fund's bonds.

The GCEE safe bonds proposal combines (temporary) common issuance and strict rules on fiscal adjustment. They do not constitute a proposal for Stability Bonds in the meaning of this Green Paper, in the sense that common issuance would be temporary and used only for Member States with public debt ratios above 60% of GDP. Instead, the GCEE proposes to introduce a temporary financing tool that would give all euro-area Member States time, and financial breathing space, to bring their debt below 60% of GDP. Once this goal is reached the fund and safe bonds will be automatically liquidated. Therefore, safe bonds are a crisis tool rather than a way of permanent integration of the euro-area government bond markets. However, even though temporary, the debt redemption fund could contribute to the resolution of the current debt overhang problem. Thus it would be worthwhile to investigate whether such fund could be the pre-cursor to permanent Stability Bonds.

2.3. Approach No. 3: Partial substitution of national issuance with Stability Bond issuance with several but not joint guarantees

Under this approach, Stability Bonds would again substitute only partially for national issuance and would be underpinned by pro-rata guarantees of euro-area Member States[25]. This approach differs from Approach No. 2 insofar as Member States would retain liability for their respective share of Stability Bond issuance as well as for their national issuance. However, issues relating to the split between Stability Bond and national issuance, including the choice of ceiling for Stability Bond issuance, would be largely the same.

This approach to the Stability Bond would deliver fewer of the benefits of common issuance but would also require fewer preconditions to be met. Due to the several, but not

[24] Published on 9 Nov. 2011, http://www.sachverstaendigenrat-wirtschaft.de/aktuellesjahrsgutachten.html, paragraphs 9-13 and 184-197

[25] Such an approach was considered in the Giovannini Group report (2000) – though through decentralised issuance and was more recently proposed by De Grauwe and Moesen (2009), Monti (2010) and Juncker and Tremonti (2010)

joint, guarantee, moral hazard would be mitigated. Member States could not issue benefiting from a possibly higher credit quality of other Member States. In addition, the continued issuance of national bonds would expose Member States to market scrutiny and market judgement that would be an additional, possibly and at times, strong deterrent to irresponsible fiscal behaviour. While this approach would be of more limited use in fostering financial market efficiency and stability, it would be more easily and more rapidly deployable. Given the several but not joint guarantees, Member States subject to high market risk premia would benefit considerably less from the creditworthiness of low-yield Member States than in Approach No. 2 and particularly than in Approach No. 1. In that sense, the possible contribution of Approach No. 3 to mitigating a sovereign debt crisis in the euro area and its possible implications on the financial sector would be much more limited. However, given the possibly much faster implementation time of this approach, it could, unlike the other two approaches possibly help addressing the current sovereign debt crisis.

The key issue with this approach would be the nature of the guarantee underpinning the Stability Bond. In the absence of any credit enhancement, the credit quality of a Stability Bond underpinned by several but not joint guarantees would at best be the (weighted) average of the credit qualities of the euro-area Member States. It could even be determined by the credit quality of the lowest-rated Member State, unless they enjoy credible seniority over national issuance in the case of all Member States (see below). This could certainly reduce the acceptance of the instrument among investors and among the higher-rated Member States and undermine the benefits of Stability Bonds, notably their resilience in times of financial stress.

In order to increase acceptance of the Stability Bond under this approach, the quality of the underlying guarantees could be enhanced. Member States could provide seniority to the debt servicing of Stability Bonds. Furthermore, Member States could provide collateral, such as cash, gold reserves which are largely in excess of needs in most EU countries, as well as earmarking specific tax receipts to servicing of Stability Bonds. More than for approach no. 2, where the common part is backed by joint and several guarantees, the feasibility of this option relies on the seniority status of the common issuer and on a prudent limit for the common issuance. This points to the need for careful analysis of the implications of this option for current bonds in circulation, where some negative pledge clauses may exist, and the identification of appropriate solutions.

While under normal conditions, the total cost of debt for a country should remain constant or fall, the marginal cost of the debt would rise. This should help in containing moral hazard and prompting budgetary discipline, even in the absence of any particular form of enhanced governance or fiscal surveillance. The Stability Bond would thereby provide a link and reinforce the effectiveness of the newly established governance package, if the amounts to be funded through common issuance are determined in close connection with fiscal targets established in the Stability programmes and create strong incentives to rapidly reduce overall debt levels.[26] It would also eliminate the need for a Treaty change in this

[26] Similarly, but presumably needing a Treaty change, Bini-Smaghi proposed a Eurobond with pro-rate guarantees but with the right to issue debt transferred from Member States to a supra-national agency. The debt could be issued up to levels agreed by the Council in the context of the yearly approval of the stability programmes, which would made impossible issuing debt to cover expenditure over the debt limit set every year. This way a "debt brake" would be created, which would force a country to make an early decision when its public debt gets too close to the agreed limit.

regard. However, maintaining the credit quality of the Stability Bond would most likely require secondary legislation to establish the seniority status of the Stability Bond.

The alternatives in the treatment of legacy bonds, as well as their respective advantages and disadvantages, would be similar to the ones described under Approach No. 2.

This option could be implemented relatively quickly. This option could be pursued without requiring changes to the EU Treaty, while secondary legislation may be helpful to strengthen the seniority principle. Furthermore, substitution of national by Stability Bonds would only be partial. Therefore, this approach could be implemented rather quickly.

Combining the approaches

As the scope, ambition and required implementation time vary across the three approaches, they could also be combined. Approach No. 1 can be considered the most ambitious approach, which would deliver the highest results in market integration and strengthening stability but it might require considerable time for implementation. Conversely, Approach No. 3, with its different scope and guarantee structure, seems to be more easily ready for a more rapid deployment. Hence, there is a certain trade-off between ambition of the features and scope of the Stability Bond and the possible speed of implementation. To overcome this trade-off, the various options could be combined as sequential steps in a process of gradual implementation: a relatively early introduction based on a partial approach and a several guarantee structure, combined with a roadmap towards further development of this instrument and the related stronger governance. Such an upfront political roadmap could help ensuring the market acceptance of Stability Bonds from the outset.

Impact on non-euro area Member States of the EU and third countries

Participation in the Stability Bond framework is usually conceived for the Member States of the euro area[27]. This is a due to the normal desire of Member States to issue debt and maintain markets in their own currency and of the fact that E-bonds might be part of a framework of a higher degree of economic and political integration. However, these Member States would nevertheless be affected by the introduction of Stability Bonds, accompanied by a reinforced framework of economic governance. Financial stability across the euro area fostered by Stability Bonds would also directly and substantially stabilise financial markets and institutions in these countries. The same would apply for any third country, to the extent of its economic and financial linkages with the euro area. On the other hand, the creation, by Stability Bonds, of a very large and sound market for safe assets might add to competition between financial markets for investors' interest.

[27] Even if in particular under approach no. 3 participation by Member States outside the euro area seems conceivable

Table 1: Overview over the three main options

	(Option 1)	(Option 2)	(Option 3)
Main features			
- Degree of substitution of national issuance by Stability Bonds	Full	Partial	Partial
- Guarantee structure	Joint and several	Joint and several	Several (not joint) with enhancements
Main effects			
- on average funding costs 1/ for Stability Bond as a whole 2/ across countries	1/ Medium positive effect from very large liquidity compensated by strong moral hazard. 2/ Strong shift of benefits from higher to lower rated countries	1/ Medium positive effect, from medium liquidity and limited moral hazard 2/ Smaller shift of benefits from higher to lower rated countries. Some market pressure on MS with high level of debt and subprime credit ratings	1/ Medium positive effect, lower liquidity effect and sounder policies prompted by enhanced market discipline 2/ no impact across country. Stronger market pressure on MS with high level of debt and subprime credit ratings
- on possible moral hazard (without reinforced governance)	High	Medium, but strong market incentives for fiscal discipline	Low, strong market incentives for fiscal discipline
- on financial integration in Europe	High	Medium	Medium
- on global attractiveness of EU financial markets	High	Medium	Medium
- on financial market stability	High	High, but some challenges in case of unsustainable levels of national issuance	Low, but it may help to deal with the current crisis thanks to its rapid implementation.
Legal considerations	Probably Treaty change	Probably Treaty change	No Treaty changes required. Secondary legislation may be helpful.
Necessary minimum implementation time	Long	Medium to long	Short

3. FISCAL FRAMEWORK FOR STABILITY BONDS

3.1. Background

The fiscal surveillance framework has already been strengthened with the recent reform of the SGP including new enforcement mechanisms. Moreover, it should be further reinforced in the near term, especially for euro-area Member States under EDP and/or requesting or receiving financial assistance, in line with the recent conclusions of the euro-area Heads of States and Governments and the Commission proposal for two new Regulations based on Article 136:

- the proposal for a Regulation on common provisions for monitoring and assessing draft budgetary plans and ensuring the correction of excessive deficit in the euro area Member States pursues the triple aim of (a) complementing the European semester with a common budgetary timeline aiming at better synchronizing the key steps in the preparation of national budgets; (b) complementing the multilateral surveillance system of budgetary policies (the preventive arm of the SGP) with additional monitoring requirements in order to ensure that EU policy recommendations in the budgetary area are appropriately integrated in the national budgetary preparations and (c) complementing the procedure for correction of a Member State's excessive deficit (the corrective arm of the SGP) by a closer monitoring of budgetary policies of Member States in excessive deficit procedure in order to secure a timely durable correction of excessive deficits;

- the proposal for a Regulation on enhanced surveillance ensures that a euro area Member State should be subject to enhanced surveillance when it is experiencing - or at risk of experiencing - severe financial disturbance, with a view to ensuring its swift return to a normal situation and to protecting the other euro area Member States against possible negative spill over effects.

These two new Regulations together with the profound changes stemming from the reform of the SGP constitute a solid foundation for enhanced coordination of budgetary policy of the euro area Member States.

Still, Stability Bonds create risks of moral hazard and require a further strengthening of the framework, depending on the chosen option. Three dimensions of such a strengthened framework may be identified:

- Increased surveillance and intrusiveness in the design and implementation of national fiscal policies would be warranted beyond the recent proposals. Further, the servicing of Stability Bonds would be fully assured.

- At the same time, the very existence of Stability Bonds could fundamentally alter budgetary processes, notably *via* the allocation mechanisms, and offer a tool to effectively enforce a rule-based framework for fiscal policies.

- Fiscal conditions could be demanded for entering the system of Stability Bonds, with the effect of reinforcing the credibility of both current adjustment plans and at cruising speed.

3.2. Increased surveillance and intrusiveness in national fiscal policies

The recent and forthcoming reforms of surveillance create a sound basis to limit these risks, but more would be needed. Such strengthening of the framework could apply to EU surveillance and to national budgetary frameworks.

In line with currently discussed changes, this would entail more thorough examination of draft budgets, not only for fiscally distressed countries but for all participating Member States. EU approval of budgets could be needed for participating Member States under certain circumstances such as high indebtedness or deficit levels. Moreover, a much stronger monitoring framework of budgetary execution would be required. This could include including regular reporting at common budgetary 'rendezvous', the development of alert mechanisms based on fiscal scoreboards, and the actual possibility of correcting slippages during execution – for instance by explicitly planning ex ante budgetary reserves and conditioning the entry into force of costly new measures on on-track execution.

National fiscal frameworks will be strengthened in the relatively near term by the implantation of the Directive on fiscal frameworks (which could in fact be accelerated). Furthermore, there are ongoing discussions to go further, *inter alia* by the introduction of rules translating the SGP framework in national legislation, preferably at constitutional level, and with adequate enforcement mechanisms. Other possible key reinforcements of national frameworks include the adoption of binding medium-term frameworks, independent bodies assessing the underlying assumptions of national budgets and effective coordinating mechanisms between levels of public administration. As regards the latter point, the pooling of debt at European level may give additional reason to bring closer the debt management of sub-sectors of public administration.

National frameworks also have an important role to play in supporting surveillance at EU level. For example, common timelines in the preparation of budgets would facilitate EU surveillance (and may in fact be necessary to devise the allocation for Stability Bonds in practice). Similarly, a proper monitoring of budget execution at EU level hinges on sound national arrangements to that aim, which could call for the adoption of common standards of control and disclosure.

A system would have to be put in place that credibly ensures the full debt service of each Member State benefiting from the issuance of Stability Bonds. This entails that the servicing of Stability Bonds, or more specifically the payment of interest on common issuance, should not come under any circumstances into question. One option to this end would be to grant extensive intrusive power at EU level in cases of severe financial distress, including the possibility to put the failing MS under some form of 'administration'. Another option, as already mentioned in the previous section, that would perhaps less infringe on national sovereignty would be to introduce a clause for participating countries on seniority of debt service in the Stability Bonds system over any other spending in the national budgets. Such rules would need to have stringent legal force, presumably at constitutional level. In addition and in accordance to that, obligations towards the Stability Bonds system would have to be senior to (remaining) new national emissions if any.

3.3. Stability Bonds as a component of an improved fiscal framework

While Stability Bonds create risks of moral hazard, they are also likely to change at the root the conditions in which budgetary policies are formulated and implemented. This is notably because European guidance on national budget policies would be translated into tangible figures by the very process of setting borrowing allocations to participating Member States. Indeed, the functioning of Stability Bonds would under all discussed options require devising *ex ante* ceilings for national borrowing that would then frame or at least affect national budgets, especially in case of wide-reaching options (i.e. Approach No. 1 above) where Stability Bonds would be expected to cover all or the bulk of new financing needs of participating countries. In this perspective, Stability Bonds may be regarded not only as a potential source of moral hazard, but also as a driver of better coordination of budgetary policies through the effective enforcement of a rule-based framework.

If Stability Bonds would provide all or the bulk of government finance (i.e. Approach No. 1) clear principles would have to guide the framework for allocations under the Stability Bond scheme:

1. *The maximum allocations would have to be based on sufficiently sound fiscal rules*, with the framework under the SGP offering a natural basis. The rules would thereby provide strong incentives for responsible fiscal behaviour.
2. *These guidelines would have to address the degree of flexibility* to deal with unexpected developments and to minimise the risk of pro-cyclical policies. A key question would be whether fiscal flexibility to respond to shocks, either country-specific or at the level of the euro area, would be provided by additional issuance of Stability Bonds or would have to rely on national issuance (provided they remain possible). The more flexibility is allowed within the system, the higher the need for constraining mechanisms (such as control accounts) to ensure that flexibility is kept within agreed limits and avoid 'debt creeping'.
3. *The rules should likely also incorporate some form of 'graduated response' to unsound fiscal developmen*ts. This graduation could take the form of reinforced surveillance, intrusiveness into national fiscal policies, as envisaged above.

In addition, financial incentives for sound fiscal policies could be built into the system. While yields of Stability Bonds would be market-based, funding costs might be differentiated across Member States depending on their fiscal positions or fiscal policies, or their market creditworthiness, as reflected by the risk-premium of national issuances over common issuances. This would provide an incentive for sound fiscal policies within the system and would mimic market discipline though in a smoother, more consistent fashion than markets. Such an incentive, which would automatically exist under the 'several guarantee' option, could be further enhanced with 'punitive' rates in case of slippages from plans.

3.4. Fiscal conditions for entering the system

In order to implement the vision of Stability Bonds as "stability bonds" one might also set fiscal conditions for Member States in order to enter and remain in the system. For example, Member States might be denied access to Stability Bonds if they have not respected their commitments under the SGP or under a reinforced fiscal framework. Alternatively,

Member States in breach of their fiscal targets might have to provide (additional) collateral for new Stability Bond issuance or might be subject to an interest surcharge. Access could also be limited as a function of the degree of non-compliance, i.e. a deviation of the general government budget by each percentage point of GDP might reduce the right to issue Stability Bonds by a certain amount of percentage points of GDP.

A number of benefits could be expected from this approach:

- First, to the extent that they wish to be included in the Stability Bonds system, Member States would have additional incentives to fully implement the consolidation and reform efforts they have already engaged into, in a fashion not unlike the convergence efforts undertaken in order to adopt the euro.
- Second, financial markets and societies at large would consider consolidation plans as more credible given the prospect for Stability Bonds. Thereby, the prospect of joining Stability Bonds could raise confidence already in the relatively near term. Such renewed confidence could in fact facilitate fiscal adjustments in some countries.
- Finally, strong fiscal conditions for entry and continued participation would be instrumental in lowering debt ratios and borrowing needs before the respective countries participate in the Stability Bonds. In this manner, risk premia and yields of Stability Bonds could be lowered.

Such an approach would imply that Member States would need to maintain residual financing possibilities, in case they do not meet these conditions. Hence, the Stability Bond would not necessarily replace the entire bond issuance of euro area Member States. One would also have to designate an institution or body responsible to monitor the compliance with these entry criteria (for example, but not necessarily, the DMO).

4. IMPLEMENTATION ISSUES

Organisational set-up

A number of technical issues would need to be decided with respect to the organisation of Stability Bond issuance. Most importantly, the institutional structure of funding operations would need to be determined, i.e. whether a centralised debt management office (DMO) would be established or whether the essential functions could be carried out in a decentralised way by national Treasuries and DMOs. As regards the decentralised approach, issuance would need to be conducted under uniform terms and procedures and would require a high degree of co-ordination. Whereas the centralised approach would avoid the coordination of bond issuances, it would still require the transmission of detailed and reliable information on Member States financing needs so that the issuances could be planned. With respect to the design of a central issuance agent, several options are conceivable, including: (a) the European Commission could serve as DMO, which would allow speedy introduction of the Stability Bond and allow the instrument to be used to manage the current crisis; or (b) the EFSF/ESM could be transformed into a full scale DMO; or (c) a new EU DMO could be created[28], which would require some time to become operational. The exact administrative

[28] In transition there could be a COM agency with COM staff and temporary national DMO staff that could be later transformed in a DMO if necessary.

cost of the introduction of Stability Bonds cannot be calculated without all other details being defined in advance. Their magnitude would also have an impact on the Member States budgets.

An important technical issue would be how a centralised DMO would on-lend the funds raised to the Member States. In principle, there would be two options, which could also be combined: (a) on-lending in the form of direct loans, where the Member State would receive its funding through a loan agreement; and (b) the direct purchase of all, or the agreed amount of, government bonds from the Member States by the DMO in the primary market. The second option would allow the DMO to also buy outstanding government debt in the secondary market, if needed.

The repayment of bonds would also need to be organised. The most straightforward way of doing this would be through transfers by the national authorities to the issuing agent that would organise the repayment to the bondholders. In order to ensure that market participants could trust that the servicing of debt would always be guaranteed and delays of payments would not occur, the DMO would need to be endowed with a stable and predictable revenue stream. While Member States would need to guarantee the liabilities of this body, it would need to be verified whether this would be sufficient or whether additional collateral, cash buffers might be required. Present national debt management offices are part of the national fiscal institutions, being backed by the governments' authority to raise taxes. For a debt management office at supranational level, there would not be such a direct link to tax revenues, which might reduce the market's acceptance of the debt instruments to be issued.

Even with Stability Bonds, there would be a need for Member States' liquidity management. It might in practice be nearly impossible to design bond issuance in such a way that it would provide a perfect match of Member States' payment streams. Therefore, there would, be a need to supplement Stability Bond issuance with day-to-day liquidity management, which could be left to the national authorities. One option would be that the Stability Bond issuance would focus on medium-term funding needs and that the national authorities would manage their payment profiles through short-term deposits and loans or bills. Irrespective of the organisational set-up, procedures would need to be developed to coordinate the funding plans of individual Member States, with a view to develop benchmark issues and to build a complete benchmark yield curve.

Relationship with the ESM

The setting up of an agent for joint issuance of Stability Bonds for euro area Member States might warrant a clarification of the division of tasks with the European Stability Mechanism. In principle, two main views can be adopted: The ESM might be considered materially redundant, as joint issuance, coupled with reinforced fiscal surveillance rules, could assume the role of organising ordinary finance for Member States' governments as well as exceptional additional finance in case of serious difficulties of a Member State. However, mixing the roles of debt management and emergency financing might be suboptimal and lead to a confusion of roles, a weakening of incentives and governance and an overly complex single funding institution. For this reason, the ESM could remain as a separate issuer of debt for the purpose of organising and meeting exceptional financing needs.

The choice of interaction with the ESM would also depend on the respective option for Stability Bonds. The ESM could be considered fairly redundant in case of Approach No. 1

for Stability Bonds. Under this approach, that foresees nearly full coverage of financing needs by Member States, also exceptional additional financing needs could be provided. The situation seems much less clear in the case of Approaches Nos. 2 and 3, under which Member States would continue to issue national bonds in parallel to joint issuance of Stability Bonds. One might even contemplate to use the ESM framework for first steps towards Stability Bonds. As the ESM will be based on several guarantees by Member States, the gradual introduction of Stability Bonds based on several (but not joint) guarantee, i.e. based on Approach No. 3, could be encompassed by ESM financing and issuance that would go beyond the current role of providing exceptional financial assistance. In principle, joint and several guarantees could be applied to the ESM at a later stage.

Legal regime governing issuance

Consideration must also be given to the appropriate legal regime under which Stability Bonds would be issued. Currently, government bonds are issued under domestic law. For international bond issuances, English law or, if the US market is targeted, New York law is often used. An equivalent EU law, under which Stability Bonds could be issued, does not exist. Although it is common practice to rely on foreign law for international bond issuances, there may be a problem if all government debt was covered by UK or US law, because the Anglo-Saxon case-law approach is different from the legal system in many Member States. The relevant court would also need to be agreed upon.

Documentation and market conventions

A decision on funding options, security characteristics and market conventions would be needed. For an established issuer, auctions would be the preferred option for issuance. Syndication has the advantage that the financial industry is involved in marketing the instruments and the pricing of a security is more predictable. In addition, typically larger amounts may be placed via syndication as it reaches also retail-investors. In addition, various security characteristics and market conventions would need to be determined. The most important ones of these are addressed in Annex 4.

Accounting issues

An additional issue in need of further clarification is the treatment of Stability Bonds under national accounting rules. In particular, the question of how the national debt-to-GDP ratios would be affected by Stability Bonds under the different guarantee structures needs to be explored. An important issue of consideration will be the nature of any new issuing entity.

5. CONCLUSIONS AND WAY FORWARD

The common issuance of Stability Bonds by euro area Member States has significant potential benefits. These include the deepening of the internal market and rendering capital markets more efficient, increasing the stability and shock resilience of the financial sector and of government financing, raising the attractiveness of euro area financial markets and the euro at global level, and reducing the impact of excessive market pessimism on sovereign borrowing costs.

However, the introduction of Stability Bonds is also associated with significant challenges. These must be convincingly addressed if the benefits are to be fully realised and potential detrimental effects avoided. In particular, a sufficiently robust framework for budgetary discipline and economic competiveness at the national level and a more intrusive control of national budgetary policies by the EU would be required, in particular for options with joint and several guarantees to limit moral hazard among euro-area Member States, underpin the credit quality of the Stability Bond and assure legal certainty.

The many options for common issuance of Stability Bonds can be categorised in three broad approaches. These approaches imply the full substitution of Stability Bond issuance for national issuance under a joint and several guarantees, a partial substitution of Stability Bond issuance for national issuance under similar guarantees and a partial substitution of Stability Bond issuance for national issuance under several guarantees. These options present different trade-offs between the expected benefits and pre-conditions to be met.

In particuar due to different degrees of required changes to the EU Treaty (TFEU), the various options would require different degrees of implementation time. The most far-reaching Approach No. 1 would seem to require the most far-reaching Treaty changes and administrative preparations both because of the introduction of the common bonds as such and the parallel strengthening of economic governance. Approach No. 2 would also require considerable lead-time. In contrast, Approach No. 3 would seem feasible without major Treaty changes and therefore relatively little delay in implementation.

The suggestions and findings in this paper are still of exploratory nature and the list of issues to be considered is not necessarily exhaustive. Furthermore, many of the potential benefits and challenges are presented only in qualitative terms. A detailed quantification of these various aspects would be intrinsically difficult and/or will require more analysis and input from various sides. Also, in many instances, the problems to be resolved or decisions to be taken are identified but not resolved.

In order to advance on this issue, more analytical work and consultation are indispensable. Several of the key concepts, possible objectives and benefits, requirements and implementation challenges merit a more detailed consideration and analysis. The views of key stakeholders in this respect are essential. In particular, Member States, financial market operators, financial market industry associations, academics, within the EU and beyond, and the wider public should be adequately consulted. The results of this consultation should be reflected in the further follow-up of the potential launching of Stability Bonds.

Accordingly, the Commission has decided to launch a broad consultation[29] on this Green Paper, which will close on [8 January 2012][30]. The Commission will seek the views of all relevant stakeholders as mentioned above and seek the advice of the other institutions. On the basis of this feedback, the Commission will indicate its views on the appropriate way forward by [mid February 2012].

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29 Feedback can be provided via all normal means,
including to a dedicated mailbox: ECFIN-Green-Paper-Stability-Bonds@ec.europa.eu;
(webpage: http://ec.europa.eu/economy_finance/consultation/index_en.htm)

30 For the sake of a timely follow up, the deviation from the normal consultation period of eight weeks seems justified by the fact that the concept of Stability Bonds/Eurobonds has already been widely discussed for a considerable amount of time.

ANNEX 1: BASIC FIGURES ON GOVERNMENT BOND MARKETS

Member State	General government debt			Central government debt	Govern-ment bond yields	CDS spreads	Credit rating
	EUR billion, end 2010	% of GDP, end 2010	% of euro area, end 2010	% of GDP, end 2010	% p.a., 10 years, 8/11/2011	Basis points p.a.; 5-year contracts, 8/11/2011	Standard & Poor's, 8/11/2011
Belgium	340.7	96.2	4.4	87.7	4.3	292.9	AA+
Germany	2061.8	83.2	26.4	53.2	1.8	89.3	AAA
Estonia	1.0	6.7	0.0	3.3	n.a.	n.a.	AA-
Greece	329.4	144.9	4.2	155.6	27.8	n.a.	CC
Spain	641.8	61	8.2	52.3	5.6	400.1	AA-
France	1591.2	82.3	20.3	67.8	3.1	183.8	AAA
Ireland	148.0	94.9	1.9	94.3	8.0	729.7	BBB+
Italy	1842.8	118.4	23.6	111.7	6.8	520.7	A
Cyprus	10.7	61.5	0.1	102.6	10.1	n.a.	BBB-
Luxembourg	7.7	19.1	0.1	17.4	n.a.	n.a.	AAA
Malta	4.3	69	0.1	68.9	n.a.	n.a.	A
Netherlands	369.9	62.9	4.7	57.3	2.2	99.6	AAA
Austria	205.6	71.8	2.6	66.2	3.0	159.9	AAA
Portugal	161.3	93.3	2.1	91.2	11.6	1050.9	BBB-
Slovenia	13.7	38.8	0.2	37.3	6.0	304.25	AA-
Slovakia	27.0	41	0.3	40.1	4.0	221.2	A+
Finland	87.0	48.3	1.1	43.9	2.3	60.63	AAA
Euro area	7822.4	85.4	100	71.6	n.a.	n.a.	n.a.
p.i.: USA	*10258*	*94.4*			*2.08*	*47.5*	*AA+*

Source: Eurostat, IMF, S&P, Bloomberg

ANNEX 2: CONCISE REVIEW OF THE LITERATURE ON STABILITY BONDS

Academics, financial analysts and policy-makers have published many papers on the idea of Eurobonds (Stability Bonds). This annex summarises those contributions published so far, by grouping them according to basic features of the proposals.

- *Credit quality and guarantee structure*: Most of the authors emphasise the importance of the safe haven status that Eurobonds should have and which would be reflected by the rating. The highest credit quality would be secured mainly through guarantee structure and/or seniority status. Two basic guarantee types to be embedded in Eurobonds emerge from the literature: (i) joint and several (Jones, Delpla and von Weizsäcker, Barclays Capital, Favero and Missale, J.P. Morgan) in which each country each year guarantees the entire Eurobond issuance and (ii) pro-rata (Juncker and Tremonti, De Grauwe and Moesen, BBVA) in which a country guarantees only a fixed share of the issuance. Favero and Missale emphasise that a Eurobond backed by joint and several guarantees could reduce exposure to crisis transmission and contagion. On the other hand, authors supporting the pro-rata guarantee argue that it reduces moral hazard. Capaldi combines a pro-rata guarantee with credit enhancements (cash buffer, over-guarantee, capital, etc) to ensure the highest credit rating. Delpla and Weizsäcker, Barclays Capital, Dübel propose to ensure the credit quality of Eurobonds by making them superior to national bonds, arguing that even in the extreme case of a sovereign default the recovery value would be high enough to fully serve the senior bonds. Dübel presents a slightly different approach of partial insurance of sovereign (senior) bonds by the ESM.

- *Moral hazard*: Moral hazard due to weaker incentives for fiscal discipline is the main argument used against Stability Bonds and the most widely discussed issue in all the proposals (in particular by Issing). Some authors propose limits on the volume of Eurobonds issued on behalf of Member States, often following the debt ceiling of 60% as defined in the SGP. Any additional borrowing needs should be financed by national bonds. This idea is explored in the Blue bond concept by Delpla and von Weizsäcker, which suggests a split of the issuance between Blue bonds, i.e. extremely liquid and safe (guaranteed jointly and severally by participating countries) bonds with senior status, and Red bonds - purely national with junior status. The pricing of red bonds would create incentives for governments to keep the budget under control. In a similar vein, Jones and Barclays Capital's propose limits both on debt and on deficits that would allow for a gradual decline of debt-to-GDP ratios. In addition to limiting the issuance of Eurobonds, Favero and Missale propose to address moral hazard through a compensation scheme based on the indexation of the interests paid by each Member State (as a function of its credit risk premium or fiscal parameters). Boonstra, De Grauwe and Moesen, BBVA and Natixis propose various types of a bonus/penalty system depending e.g. on the capacity of different Member States to reduce their general government deficit and debt.

- All authors agree that enhancement of fiscal discipline should be the cornerstone of any Eurobond project, independent on the scope or guarantee structure. Apart from the 'red'/national issuance, Favero and Missale suggest restricting the participation to the Member States with the highest credit rating or to issue only a short-maturity low-risk type of instrument such as T-bills. Barclays, BBVA, Delpla and von Weizsäcker,

Eijffinger, Becker and Issing envisage establishing independent fiscal auditing bodies and special euro-area bodies that would coordinate fiscal and economic policies. Under Delpla's and Weizsäcker's sophisticated system, an independent stability council would propose the annual allocation. This allocation would subsequently be approved by the national parliaments of participating Member States, having the ultimate budgetary authority required to issue the (Blue) Eurobond mutual guarantees. Any country voting against the proposed allocation would thereby decide to neither issue any (Blue) Eurobonds in the coming year nor guarantee any Blue bonds of that particular vintage. Boonstra proposes that countries that break the rules should immediately be severely punished, e.g. by losing funds from the EU budget and losing political influence of the voting right in the bodies of the ECB.

- *Practical aspects of issuance*: Most authors propose establishing a joint debt agency that would coordinate the issuance and manage the debt. In the Blue-Red bonds type of proposals the issuance of the national part of the debt would remain with the national treasuries.

- *Scope of participating countries*: Becker enumerates options for the participation in the Eurobond. Those could be: (i) common bonds issued by countries with the same rating; (ii) joint bonds on an ad hoc basis similar to the joint bonds issued by some German federal states; (iii) participation in a common government bond only when EMU countries qualify through solid fiscal consolidation in boom times, or (iv) Germany and France promoting one liquid short-term instrument or a joint European market for treasury bills only.

ANNEX 3: OVERVIEW OF RELATED EXISTING INSTRUMENTS

1. European Union

The European Commission, on behalf of the European Union, currently operates three programmes under which it may grant loans by issuing debt instruments in the capital markets, usually on a back-to-back basis. All facilities provide sovereign lending. The EU is empowered by the Treaty on the Functioning of the EU to adopt borrowing and guarantee programmes that mobilise the financial resources to fulfil its mandate.

- Under the *BoP programme* the EU provides financial assistance to non-euro area Member States that are seriously threatened with balance-of-payments (BOP) difficulties (Art. 143 TFEU).
- Under the *EFSM programme*, the European Commission is empowered to contract borrowings on behalf of the EU for the purpose of funding loans made under the European Financial Stability Mechanism (Council Regulation No 407/2010 of 11 May 2010). Since December 2010, support programmes for Ireland and Portugal have been agreed on for EUR 22.5 billion and EUR 26 billion, respectively.
- The *MFA programme* is providing loans to countries outside the European Union. Macro-Financial Assistance (MFA) is a policy-based financial instrument of untied and undesignated balance-of-payments support to partner third countries (Art. 212 and 213 TFEU). It takes the form of medium/long-term loans or grants, or a combination of these, and complements financing provided in the context of an International Monetary Fund's reform programme.[31]

Credit Rating

The EU's AAA rating is a reflection of several factors. Borrowings are direct and unconditional obligations of the EU and guaranteed by all EU Member States. Budget resources are derived almost entirely from revenue paid by Member States independently of national parliaments including tariffs and duties on imports into the EU and levies on each Member State's VAT receipts and GNI. On this basis, bonds issued by the EU are zero-risk weighted and can be used as collateral at the ECB.

For all borrowings, investors are ultimately exposed to the credit risk of the EU, not to that of the beneficiaries of loans funded. Should a beneficiary country default, the payment will be made from the EU budget (EUR 127 billion in 2011). EU Member States are legally obliged by the EU Treaty to provide funds to meet all EU's obligations.

Key Features of EU issuance

The EU has so far issued benchmark-size bonds under its Euro Medium Term Note programme (EMTN), which has been upsized to EUR 80 billion to take into account issuance under the EFSM. The resumption in benchmark issuance started end of 2008, driven by the crisis.

With the activation of EFSM for Ireland and Portugal, the EU has become a frequent benchmark issuer. The total borrowing plan for the EFSM for 2011 amounts to about EUR 28

[31] For further information, see http://ec.europa.eu/economy_finance/eu_borrower/macro-financial_assistance/index_en.htm

billion (EUR 13.9 billion for Ireland, EUR 14.1 billion for Portugal; under BoP and MFA: about EUR 2 billion). Funding is exclusively denominated in euro.

As EU assistance is of a medium-term nature, the maturity spectrum is normally 5 to 10 years, but can be expanded to a range from 3 to 15 or occasionally 30 years.

“Back-to-back” on-lending ensures that the EU budget does not assume any interest rate or foreign exchange risk. Notwithstanding the back-to-back methodology, the debt service of the bond is the obligation of the European Union which will ensure that all bond payments are made in a timely manner.

As a frequent benchmark borrower, within the above parameters the EU intends to build a liquid yield curve. The EU commits lead managers to provide an active secondary market, quoting two-way prices at all times and it monitors that such commitments are applied.

Determination of EU funding

EU loans are financed exclusively with funds raised on the capital markets and not by the other Member States nor from the budget.

The funds raised are in principle lent back-to-back to the beneficiary country, i.e. with the same coupon, maturity and amount. This back-to-back principle imposes constraints on EU issuance, i.e. the characteristics of the issued financial instruments are defined by the lending transaction, thus implying that it is not possible to fund a maturity or amount different from the loan.

The Council Decision determines the overall amount of the country programme, instalments and the maximum average maturity of the loan package. Subsequently, the Commission and the beneficiary country have to agree loan/funding parameters, instalments and tranches thereof. In addition, all but the first instalment of the loan depend on compliance with various policy conditions similar to those of IMF packages, which is another factor influencing timing of funding. This implies that timing and maturities of issuance are dependent on the related EU lending activity.

EFSM Process

1. A Member State which is threatened with a severe economic or financial disturbance caused by exceptional occurrences beyond its control may request support from the EU under the EFSM.
2. The Council of the EU decides by qualified majority voting, based on a recommendation by the European Commission.
3. The Member State negotiates an economic adjustment programme with the European Commission, in liaison with the IMF and the ECB.
4. The beneficiary Member State negotiates with the European Commission the details of a Memorandum of Understanding (MoU) and a loan agreement and decides on implementation.
5. Following signature of the MoU and Loan Agreement, and a request for disbursements by the beneficiary Member State, funds are raised in international capital markets and the first tranche is released. Subsequent tranches of the loan are released, once the EU Council has assessed the Member State's compliance with the programme conditionality.

2. European Financial Stability Facility (EFSF)

The European Financial Stability Facility (EFSF 1.0) was created by the euro area Member States (EA MS) following the decision taken on 9 May 2010 by the ECOFIN Council. The EFSF 1.0 was founded as Luxembourg-registered company. The main purpose of the EFSF is to provide financial assistance to euro area Member States. As part of an overall assistance package of EUR 750 bn, the EFSF received guarantees by euro area Member States totalling EUR 440 billion for on-lending to euro area MS in financial difficulty, subject to conditionality in the context of an EU/IMF economic adjustment programme.

Lending capacity

Under EFSF 1.0 the effective lending capacity of the EFSF is limited to EUR 255 billion in order to preserve the AAA rating of EFSF's bonds (see below).

Credit Rating

The EFSF 1.0 has been AAA rated by credit rating agencies. However, under the initial agreement (EFSF 1.0), this has come at the expense of a reduced lending capacity, as each EFSF loan has to be covered by i) guarantees from AAA-rated sovereigns; ii) an amount of cash equal to the relevant portion of the EFSF cash reserve; and iii) a loan-specific cash buffer. The AAA rating is essentially based on the following four elements:

1. *Guarantee mechanism*: The guarantee agreement between the euro area Member States requires them to issue an irrevocable and unconditional guarantee for the scheduled payments of interest and principal due on funding instruments issued by the EFSF. Furthermore, the guarantee covers up to 120% of each euro area Member State's share of any EFSF obligations (principal and interest), which is however capped by the respective Guarantee Commitments as stipulated in Annex 1 of the EFSF Framework Agreement. Any shortfall due to this cap would be covered by the cash reserves and cash buffer.
2. *Cash reserve*: Funds distributed to a borrower will be net of an up-front service fee, which is calculated as 50 bps on the aggregated principal amount of each loan and the net present value of the interest rate margin that would accrue on each loan at the contractual rate until its scheduled maturity date.
3. *Loan-specific cash buffer*: Each time a loan is provided to a Member State, the EFSF has to establish a loan-specific cash buffer, in a size so that each EFSF loan is fully covered by AAA guarantees and an amount of cash equal to the relevant portion of the EFSF cash reserve plus this respective loan- specific cash buffer.
4. *Potential additional support*: Under the EFSF Framework Agreement, the size of the EFSF Programme could be modified by unanimous approval by the guarantors. However, the capacity of the EFSF cannot be increased indefinitely, as this may deteriorate the credit position of the guaranteeing AAA-sovereigns. Should any of these loose its AAA rating, the capacity of the EFSF would shrink by the guarantee amount provided by that country.

Bonds issued by the EFSF are zero risk-weighted and ECB repo-eligible. The credit rating of the EFSF could be negatively affected by a potential deterioration in the creditworthiness of euro area Member States, especially the AAA-rated guarantors. As the EFSF is several guaranteed, a single rating downgrade of a guaranteeing AAA-sovereign would downgrade the AAA rating of the EFSF, if no further credit enhancements are put in place.

Conditionality

Any financial assistance by the EFSF linked to the existence of an economic adjustment programme including strict policy conditionality as set out in a Memorandum of Understanding (MoU). The Commission negotiates with the beneficiary country the MoU in liaison with the ECB and IMF.

Decision making

The decisions to grant funds under the EFSF are taken unanimously.

3. European Financial Stability Facility (EFSF 2.0)

The EFSF Framework Agreement has been modified in order to have the full lending capacity of EUR 440 billion available.

Lending capacity

Under EFSF 2.0 the effective lending capacity of the EFSF is limited to EUR 440 billion in order to preserve the AAA rating of EFSF's bonds (see below).

Credit Rating

The EFSF 2.0 has received a AAA rating by credit rating agencies. To increase the effective EFSF lending capacity to a maximum of EUR 440 billion, a revision of the EFSF Framework Agreement has been made with a view to having an increase in the guarantees from AAA-rated sovereigns to EUR 440 bn. Essentially, then, the AAA rating is based on one element only, the guarantee mechanism.

That guarantee agreement between the EA Member States requires them to issue an irrevocable and unconditional guarantee for the scheduled payments of interest and principal due on funding instruments issued by the EFSF. Furthermore, the guarantee covers up to 165% of each euro area Member State's share of any EFSF obligations (principal and interest), which is however capped by the respective Guarantee Commitments as stipulated in Annex 1 of the EFSF Framework Agreement. Bonds issued by the EFSF are zero risk-weighted and ECB repo-eligible.

The credit rating of the EFSF could be negatively affected by a potential deterioration in the creditworthiness of any euro area Member State, especially of any AAA-rated guarantor. As the EFSF is several guaranteed, a single rating downgrade of a guaranteeing AAA-sovereign would downgrade the AAA rating of the EFSF, if no further credit enhancements are put in place.

Conditionality

Any financial assistance by the EFSF is linked to strict policy conditionality as set out in a Memorandum of Understanding (MoU). The Commission negotiates with the beneficiary country the MoU in liaison with the ECB and IMF. Beyond loans within a macroeconomic adjustment programme, the EFSF can also grant credit lines, carry out operations on the primary and secondary bond markets and grant loans outside of programmes for recapitalising financial institutions.

Decision making

The decisions to grant funds under the EFSF are taken unanimously.

4. European Stability Mechanism (ESM)

On 24-25 March 2011, EU Heads of States and Governments endorsed the creation of the ESM as a permanent crisis mechanism to safeguard the euro and financial stability in Europe. The ESM will be world largest international financial institution, with an EUR 700 billion capital, of which EUR 80 billion will be paid in. The entry into force of the ESM was initially planned for July 2013, but is expected to be advanced to mid 2012.

5. German Länder joint bonds

A special segment of the German Länder (states) bond market is the so called Jumbos. These are bonds issued by a group of German states. Up to now, 38 Jumbos have been issued by syndicates of five to seven states, with the exception of the particularly large Jumbo of 1997 which was shared by ten states. So far, all Jumbos have been arranged as straight bonds and the average issue size is slightly higher than EUR 1 billion, more than seven times the size of an average Land issue. Participants of the Jumbo programme are mostly states which are either small by size or population. Jumbos are more liquid than typical Länder bonds, saving the state treasurers part of the liquidity risk premium compared to a rather small single-issuer bond. From the investors' point of view, a Jumbo constitutes a structured bond composed of separate claims against the participating states according to their share in the joint issue. Thus, the states are severally but not jointly liable for the issue.

Bond characteristics

- Issuance frequency: usually 2-3 issues per year
- Maturities: 5-10 years
- Size: EUR 1-1.5bn
- One state coordinates the issue and acts as a paying agent.

Credit Rating

The issues are rated AAA by Fitch. Background is that Fitch until recently assigned AAA ratings to all German states because of the Länderfinanzausgleich (this is an equalisation process which is a solidarity and implicit guarantee mechanism between the Länder and ultimately the federal state). This also explains the often split ratings between Fitch and the other agencies. Note that not all German Länder are rated by Fitch any more.

According to Fitch, the AAA rating reflects the individual creditworthiness of all seven German federated states involved in the joint issuance. It is based on the strong support mechanisms that apply to all members of the German Federation and the extensive liquidity facilities they benefit from, which ensure timely payment and equate the creditworthiness of the states to that of the Federal Republic of Germany. Fitch notes that the support mechanisms apply uniformly to all members of the German Federation: the federal government (Bund) and the 16 federated states. The differences in the federated states' economic and financial performances are irrelevant, as all Länder are equally entitled to financial support from the

federal government in the event of financial distress. German Länder joint bonds are zero-risk-weighted and ECB repo-eligible.

ANNEX 4: DOCUMENTATION AND MARKET CONVENTIONS

As mentioned in Section 4, the introduction of a Stability Bond would require determining various security characteristics and market conventions would need to be determined. These would possibly include:

- Jurisdiction of Stability Bond issuance: EFSF and EU/EFSM bonds are issued under English law, but this may be meet political resistance in this case.

- Maturity structure of securities: The funding strategy of the Stability Bond should be determined with a view to i) develop a benchmark issues and a yield curve, and ii) to optimise funding costs, as issuing in some segments of the yield curve is more costly than for others. The issuance of short-term paper (t-bills) in addition to longer maturities would improve the flexibility of the treasury and would improve access to funding significantly.

- Coupon types (fixed, variable, zero, inflation-linked): For a start and to facilitate the development of benchmark status, it may be preferable to concentrate on plain vanilla security structures. This would also facilitate the development of related derivative instruments, in particular options and futures.

- Stock exchange on which securities would be listed: EFSF and EU/EFSM bonds are currently listed on the Luxembourg exchange. For the Stability Bond this may prove to be too limited although listing on several exchanges would involve additional costs.

- Settlement conventions: These conventions should be set with a view to support the attractiveness of the instruments, i.e. for short-term paper with t+1 (to facility short-term treasury objectives) and for longer-term securities with t+3 (to minimize the risk of settlement failures).

- Strategy to create and maintain an investor basis: Relationships with potential investors would need to be established and could require decisions on whether a group of primary dealers will need to be established, how the retail sector will be integrated, etc.

- Introduction of Collective Action Clauses, to allow for an organised procedure to resolve any future solvency issues.

REFERENCES

Assmann, Ch. and J. Boysen-Hogrefe (2011), Determinants of government bond spreads in the euro area: in good times as in bad, Institut für Weltwirtschaft Kiel, forthcoming in Empirica.

Barclays Capital Economic Research (2011), Euro Themes, A proposal to restore euro area stability 18 August 2011

BBVA (2011), A unified sovereign debt issuance procedure in the Euro area with a Basket Bond, Global Public Finance – Policy report No. 1

Becker, W., The Creation of a Common European Government Bond, Arguments Against and Alternatives, Cahier Comte Boël, No. 14, ELEC, April 2010

Bini-Smaghi, L. (2011), European democracies and decision-making in times of crisis. Speech at the Hellenic Foundation for European and Foreign Policy, Poros, 8 July 2011, http://www.ecb.int/press/key/date/2011/html/sp110708.en.html

Boonstra, W.W. (2010), The Creation of a Common European Bond Market, *Cahier Comte Boël*, No. 14, ELEC, April 2010.

Carstensen, K.(2011), Eurobonds, Ausweg aus der Schuldenkrise?, Ifo Institute, http://www.cesifo-group.de/portal/page/portal/ifoContent/N/pr/pr-PDFs/PK_20110817_Eurobonds_PPT.pdf

De Grauwe, P. and W. Moesen (2009), Gains for all: a proposal for a common euro bond, *Intereconomics*, May/June 2009, pp.132 – 135.

Delpla, J. and von Weizsäcker, J. (2010), The Blue Bond Proposal, *Breugel Policy Briefs 420*, Bruegel, Brussels 2010

Dübel, H-J. (2011), Partial sovereign bond insurance by the eurozone: A more efficient alternative to blue (Euro-)bonds, CEPS Policy Brief No. 252

EPDA/SIFMA (2009), Towards a Common European T-bill Briefing Note March 2009

Eijffinger, S.C.W. (2011), Eurobonds – Concepts and Implications, *Briefing* Note to the European Parliament, March 2011

Favero, C.A. and A. Missale (2010), EU Public Debt Management and Eurobonds, Chapter 4 in Euro Area Governance - Ideas for Crisis Management Reform, European Parliament, Brussels

Frankfurter Allgemeine Zeitung (2011) Gemeinschaftsanleihen: Eurobonds erhöhen Zinslast um Milliarden, by Philip Plickert, 19 July 2011, http://www.faz.net/aktuell/wirtschaft/europas-schuldenkrise/gemeinschaftsanleihen-eurobonds-erhoehen-zinslast-um-milliarden-11115183.html#Drucken

Giovannini Group (2000), Report on co-ordinated issuance of public debt in the euro area, http://ec.europa.eu/economy_finance/publications/giovannini/giovannini081100en.pdf .

Issing, O. (2009), Why a Common Eurozone Bond Isn't Such a Good Idea, White Paper No. 3, Center for Financial Studies, Frankfurt 2009

Jones, E. (2010), A Eurobond Proposal to Promote Stability and Liquidity while Preventing Moral Hazard, ISPI Policy Brief, No 180, March 2010

Jones, E. (2011), Framing the Eurobond, ISPI Commentary, 1 September 2011

J.P. Morgan (2011), Designing and pricing the gold-plated Stability Bond, Global Fixed Income Markets Weekly, 26 August 2011

Monti, M. (2010) A new strategy for the Single Market, At the service of Europe's Economy and society, Report to the President of the European Commission, http://ec.europa.eu/bepa/pdf/monti_report_final_10_05_2010_en.pdf

NATIXIS (2011), What bonus/penalty system for the Stability Bond? Flash Economics No 613, 22 August 2011

Prodi, Romano and Alberto Quadrio Curzio (2011), EuroUnionBond ecco ci che va fatto, Il Sole 24 hore, 23 August 2011

Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung (2011), Jahresgutachten 2011/12

Schäuble, W. (2010), Schäuble on Eurobonds and fiscal union, interview with Querentin Peel, Financial Times, 5 December 2010, http://video.ft.com/v/698922855001/Sch-uble-on-eurobonds-and-fiscal-union

Juncker, J.C. and G. Tremonti (2010), Stability Bonds would end the crisis, *The Financial Times*, 5 December 2010