Proposals for common Eurozone sovereign issuance

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The Association for Financial Markets in Europe (AFME) represents a broad range of European and global participants in the wholesale financial markets. Its members comprise pan EU and global banks as well as key regional banks and other financial institutions. AFME advocates stable, competitive and sustainable European financial markets that support economic growth and benefit Society.

This report from the Association for Financial Markets in Europe is intended to offer policymakers an insight into views of bond market participants on the practicalities of common Eurozone sovereign issuance. The report has benefited from the contributions of a dedicated group of experts from 22 of AFME’s sell-side member firms, along with specialists from eight member and non-member firms from the investor community.

The responsibility for the content of the report lies solely with AFME. The opinions in this paper do not necessarily reflect the views of any individual participant.

AFME and its members look forward to continuing to work constructively with policymakers and contributing the market’s perspective on the important topic of common issuance.

AFME contact:

Sander Schol
Director
Phone: +44 (0)20 7743 9352
sander.schol@afme.eu
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Phone: +44 (0)20 7743 9352
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Proposals for common Eurozone sovereign issuance:

In this report, we suggest a framework to determine the attributes essential for the success of a common Eurozone sovereign bond – which we refer to as a Eurobond - and suggest three different structures that have a reasonable probability of success. We examine these structures from the perspective of the financial markets. Political and legal considerations, although impossible to exclude entirely, are not the prime focus of our analysis.

Framework used in designing Eurobond structures

Any Eurobond structure would demonstrate a combination of three primary attributes: type of issuing agent, liability structure, and number of tranches.

The ‘number of tranches’ attribute is best explained using the example of blue and red bonds. The terms blue bond and red bond were introduced by the Bruegel institute in May 2010 (Bruegel Policy Brief 2010/03). Its proposal, which builds on earlier studies of AFME/Primary Dealers in 2008/2009, suggests that sovereign debt in Euro-area countries be split into two parts. The first part, the senior ‘Blue’ tranche of up to 60 percent of a member state’s GDP, would be pooled among participating countries and jointly and severally guaranteed. The second part, the junior ‘Red’ tranche, would retain debt in excess of 60 percent of GDP as a purely national responsibility. Such an issuance structure would therefore have two tranches of blue and red bonds. The terminology blue and red bonds is used in two of the three structures presented in this paper. Note that sovereign debt in the Eurozone is currently issued in a single tranche structure.

For the purpose of this report, a ‘perfect’ Eurobond is defined as a structure that allows a large amount of funds to be raised in capital markets over an extended period of time. Such a Eurobond would have the highest possibility of success. Given the constraints that we must realistically apply from a market perspective, the combination of primary attributes that would best deliver this aim is:

1. **Issuing agent**: Issued by a fiscal authority with the power to tax and spend;
2. **Liability**: Jointly and severally (J&S) guaranteed by all member states; and
3. **Number of tranches**: Having only one tranche on which every member state relies for issuance

At the other extreme, the least attractive structure would be:

1. **Issuing agent**: Issued by a Special Purpose Vehicle (SPV);
2. **Liability**: Severally guaranteed; and
3. **Number of tranches**: Issued in two or more tranches.

Between these two extremes are six other possible combinations of these attributes. We believe that a successful Eurobond needs a minimum of one-and-a-half primary attributes. (A ‘half’ score is awarded in case an attribute is neither optimally nor negligibly present in a structure.) Below, we will use this reward system to judge the three proposals.
However, these primary attributes alone are not sufficient to determine the success of a structure. There are a number of secondary attributes that need to be taken into consideration. These include:

- Credit enhancement structure
- Estimated time to implementation
- Possibility of significant capital raising
- Assurance of fiscal discipline in member states
- Danger of competition with sovereign issuance
- High credit rating (seniority of Eurobonds / Credit Default Swap (CDS) triggers)
- Inclusion in sovereign indices
- Low risk premiums
- Legal framework under which Eurobonds will be issued
- ECB repo eligibility
- Risk to Eurobonds of a country downgrade

Some of these secondary attributes deserve some further clarification, specifically:

1. **Fiscal discipline**: It is important that red bonds are junior to blue bonds/legacy debt.¹ This would ensure that countries have little incentive to issue red bonds, given that interest costs on red bonds will be punitive.

2. **Competition with sovereign issuance**: All single-name sovereign issuance may need to be curtailed contractually (or even prohibited) so that Eurobonds do not have to compete with higher quality names such as German Bunds.

3. **Ensuring that CDS is not triggered**: Triggering CDS, especially on high-quality names such as Germany and France, would be extremely disruptive to financial markets. Therefore, Eurobonds need to be on equal footing with legacy debt.²

4. **Inclusion in sovereign indices**: Debt issued by a fiscal authority will be included in the sovereign indices, while SPV-like debt is likely to be included in the credit indices. Since the sovereign index is about twice the size of the credit index, it is better for debt to be included in a sovereign index.

5. **Legal framework under which Eurobonds will be issued**: Eurobonds should preferably be written under the law of a non-participating European jurisdiction such as the UK. Using the local law of a country that participates in the structure would give that country an unfair advantage over the bond issue. US law would not be appropriate as the EU does not have power to apply directives under it.

¹ Legacy debt refers to sovereign debt currently outstanding in the market.

² We rejected the option of making blue bonds senior to legacy debt because 1) Of the risk of triggering CDS and pushing secondary market prices down, thereby hurting our objective to restore financial stability, and 2) Making legacy debt junior to Eurobonds may tempt countries to default on the former and free ride the latter. Still, making the blue bonds senior to legacy debt is a variant that could also be considered. It may appear politically more appealing to fiscally strong countries.
6. **Country downgrade risk**: A downgrade of a previously AAA-rated member state would pose a risk to most Eurobond structures. Such an event runs the risk of increasing the cost of funding.

Next to primary and secondary attributes, the analysis of Eurobond structures rests on two assumptions:

1. To avoid market disruption, the stock of current outstanding debt will not be impacted by the launch of Eurobonds. Outstanding debt will be replaced with Eurobonds only as it rolls.
2. In our analysis, only 14 Eurozone countries could participate in the structure. The three countries which are currently funded by the EFSF, EFSM and IMF may be allowed to join later, once they have achieved debt sustainability.

**Proposed Eurobond structures**

With the help of these primary and secondary attributes, and based on the stated assumptions, AFME has designed three different Eurobond structures (A, B and C) that we believe would have a reasonable chance of success in the long run. As mentioned above, we define success as the ability to sell large amounts of bonds over a long period of time.

The first two structures (options A and B) have around one-and-a-half of the three desirable primary attributes discussed in the section above, while the third (option C) has two of the three. **Exhibit 1** provides an overview of the options and their primary attributes. Note that the current European Financial Stability Facility (EFSF) has virtually none of the primary attributes desired by markets (it is an SPV with several guarantee and is issuing debt in competition with the debt issuance programs of other member states).³

**Appendix A** lays out these three options in tabular format and **appendix B** provides a detailed description of the three structures.

Briefly, option A is:

- An SPV structure.
- Characterised by several liability, but with 200% guarantees from member states to ensure AAA rating.⁴
- A single-tranche bond offering. Due to market capacity constraints, this structure would be able to issue debt in large sizes only if all new sovereign issuance were contractually curtailed, ensuring that SPV debt is the only source of sovereign duration.

We assign this structure a medium probability of success if all sovereign issuance were curtailed, and a low probability of success if issuance were not curtailed.

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³ The EFSF is actually somewhere between a “joint and several” and a “several” guarantee structure since it offers overguarantees from MS on its debt.

⁴ This overguarantee means that it is somewhere between a J&S and a severally guaranteed structure – we therefore give it 0.5 point on this attribute in exhibit 1.
Option B is:
- A fiscal authority structure that has the power to tax and spend.
- Characterised by several liability but with 200% guarantees.
- A two-tranche (blue/red bonds) structure. Annual blue bond issuance is capped at the 3% budget deficit/GDP ratio plus the annual refinancing needs for each of the individual Eurozone issuers. Furthermore, issuance is capped when the level of blue bonds issued by an individual country has reached a threshold of 60% of its GDP.

We assign a medium probability of success to this structure.

Option C is very similar to option B in many ways, with the following enhancements:
- Joint and several guarantees are issued on the blue bonds.
- Access to the blue bond facility, would not be limited by automatic triggers in the form of 3% or 60% caps. Instead it would be rationed by capping the funding of any slippage from a centrally agreed national budget deficit. An individual country would therefore have less discretion to issue red bonds.

We assign a high probability of success to this structure and expect blue bonds would be priced somewhere between French and German paper.

Clearly, many Eurobond structures besides the ones discussed above are possible. The framework that we have presented above allows policy makers to select from a menu of primary and secondary attributes to create a Eurobond of choice, keeping in mind that some structures will have higher probability of success than others.

**Exhibit 1:** From the market’s perspective, an ideal Eurobond would have three desirable primary attributes. It would be issued by a fiscal authority via a J&S guaranteed single-tranche structure. Options A and B each have one-and-a-half of these three desirable attributes, while option C has two. The various Eurobond options and their primary attributes
Exhibit 2: The markets for Agency and High Yield debt are a fraction of the sovereign debt market, with the Agency market comprised largely of AAA-rated paper. Selling large amounts of SPV debt may therefore be difficult unless competition from sovereign debt issuance is eliminated. Additionally, lower rated red bonds may only be sold sparingly by weaker countries due to market capacity constraints.

Outstanding market size of various fixed income markets; in trillions of euros

<table>
<thead>
<tr>
<th>Index</th>
<th>Outstanding market size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Govie EMU index</td>
<td>4.1</td>
</tr>
<tr>
<td>European High Grade* index (Corp incl financials, SSA)</td>
<td>2.1</td>
</tr>
<tr>
<td>European High Yield** index</td>
<td>0.2</td>
</tr>
<tr>
<td>European Structured Products index (covered bonds/ABS)</td>
<td>3.1</td>
</tr>
<tr>
<td>SSA*** of which..</td>
<td></td>
</tr>
<tr>
<td>...Supra</td>
<td>0.7</td>
</tr>
<tr>
<td>...Subnational</td>
<td>0.2</td>
</tr>
<tr>
<td>...Sovereign</td>
<td>0.1</td>
</tr>
<tr>
<td>...Agency</td>
<td>0.3</td>
</tr>
<tr>
<td>...Landesbank</td>
<td>0.1</td>
</tr>
</tbody>
</table>

* High/Investment Grade: BBB or higher rated
** High Yield: BB or lower rated
*** Sovereign, Supranational and Agency
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Option A</th>
<th>Option B</th>
<th>Option C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criteria</strong></td>
<td>SPV structure with overguarantees</td>
<td>Fiscal authority issuing blue/red bonds with overguarantees (several capped liability)</td>
<td>Fiscal authority issuing blue/red bonds with J&amp;S guarantees (J&amp;S capped liability)</td>
</tr>
<tr>
<td><strong>Issuance agent</strong></td>
<td>SPV (Euro-Area Borrowing Authority / EABA)</td>
<td>Central fiscal authority (European Debt Agency)</td>
<td>Central fiscal authority (European Debt Agency)</td>
</tr>
<tr>
<td><strong>Joint / several liability</strong></td>
<td>Several, but with significant overguarantees to protect ratings.</td>
<td>Several, but with significant overguarantees to protect ratings.</td>
<td>Joint and several liability.</td>
</tr>
<tr>
<td><strong>Number of new tranches</strong></td>
<td>One. EABA debt is on equal footing with legacy debt to avoid triggering CDS.</td>
<td>Two. Blue bonds are on equal footing with legacy debt to avoid triggering CDS, but senior to red bonds to ensure fiscal discipline.</td>
<td>Two. Blue bonds are on equal footing with legacy debt to avoid triggering CDS, but senior to red bonds to ensure fiscal discipline.</td>
</tr>
<tr>
<td><strong>Structure of the bond</strong></td>
<td>There is a contractual commitment to cease single-name sovereign debt issuance to reduce competition with highly-rated sovereigns. A borrowing agency (EABA) is set up without size limits to fund borrowing of all Eurozone countries. All funding is channelled through EABA. (note that appendix B provides an alternative that focuses on T-bills only)</td>
<td>New single-name sovereign debt issuance is prohibited except for red bonds. Central fiscal authority issues several liability blue bonds, with funding capped at 3% deficit/GDP + annual refinancing needs of each individual country. Furthermore, blue bond funding capped at 60% debt/GDP for each country. Red bonds are issued on an individual, own name, and subordinated basis if blue bond funding is insufficient.</td>
<td>New single-name sovereign debt issuance is prohibited except for red bonds. Central fiscal authority issues J&amp;S liability blue bonds. Access to the blue bond facility, would not be limited by automatic triggers in the form of 3% or 60% caps. Instead it would be rationed by capping the funding of any slipage from a centrally agreed national budget deficit. An individual country would therefore have less discretion to issue red bonds.</td>
</tr>
<tr>
<td><strong>Credit enhancement</strong></td>
<td>EABA will receive €2 guarantee for each €1 lent to a member state. Since weaker countries will borrow more than stronger ones, a disadvantage is that EABA bond ratings may get weaker over time unless the percentage of overguarantees is high enough.</td>
<td>Same as option A but may possibly work with smaller overguarantees. Additionally, credit enhancements via cash buffers may be withheld from less fiscally sound countries.</td>
<td>None. Joint and several guarantee is sufficient.</td>
</tr>
<tr>
<td><strong>Efficiency</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Time to implementation</strong></td>
<td>1-2Y</td>
<td>2-3Y</td>
<td>3-5Y</td>
</tr>
<tr>
<td><strong>Maximum funding possible efficiency of the structure</strong></td>
<td>This structure will be able to issue debt in large sizes only if all new sovereign issuance ceases and EABA bonds are the only source of sovereign duration. Given the SPV structure, this market may never be as deep or liquid as the US Treasury market.</td>
<td>Blue bonds could potentially be issued in amounts similar to gross total bond issuance (c. €800bn annually). With a 60% debt/GDP trigger, it is unlikely that red bonds are required until 2017 for Belgium, 2018 for Italy and 2021 for Spain. Germany, France and Netherlands are unlikely to issue red bonds until after 2030.</td>
<td>Because there is no need for (over)guarantees, this option ranks first in efficiency. Because issuance of red bonds is not automatic as in option B, the total issuance size of blue bonds relative to red bonds could be larger than under this option. This would increase the potential for a credible reserve currency status for the Euro.</td>
</tr>
<tr>
<td><strong>Fiscal discipline</strong></td>
<td>Rule-based approach will be required to ensure fiscal discipline</td>
<td>Issuance of blue bonds is capped by the 3% and 60% benchmarks, with market rates for red bonds enforcing fiscal discipline. Extra cash buffer requirement for weaker member states</td>
<td>A centralised budgetary process is key in limiting the issuance of bonds. Overspending (relative to a pre approved budget plans) would be identified and corrected on a quarterly basis.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Option A</td>
<td>Option B</td>
<td>Option C</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Minimum rating needed</strong></td>
<td>Given that this is an SPV structure, AAA rating would be essential. Around 90% of the Supra/Agency market is rated AAA, suggesting that non-AAA rated bonds cannot be sold in any significant size.</td>
<td>In the initial stages, issuance of blue bonds would represent a relatively small proportion of total debt outstanding. With estimated strong investor interest and inclusion in sovereign indices, an AAA rating would be assured. In the long-run it would be possible for the blue bonds to be issued efficiently without the need for a AAA rating. Red bonds may be rated sub-investment grade for poorly rated issuers.</td>
<td>Blue bonds should be AAA-rated as long as the outstanding amount of issuance is small relative to the size of the outstanding bond market. In the long run, when issuance sizes could have increased, at least a high AA is anticipated.</td>
</tr>
<tr>
<td><strong>Inclusion in indexes</strong></td>
<td>These bonds will be included in credit indices, which are roughly half the size of sovereign indices. If sovereign bonds are no longer issued in Europe, however, the credit indices will eventually increase in size relative to the sovereign index.</td>
<td>These bonds will be included in sovereign indices.</td>
<td>These bonds will be included in sovereign indices.</td>
</tr>
<tr>
<td><strong>Potential investor base for equity tranche</strong></td>
<td>Not applicable</td>
<td>Demand for red bonds could be limited by the fact that the current market for sub-investment grade bonds is relatively small.</td>
<td>Demand for red bonds could be limited by the fact that the current market for sub-investment grade bonds is relatively small.</td>
</tr>
<tr>
<td><strong>Risk premium</strong></td>
<td>Since this is an SPV structure, it is believed that the bonds will price at a significant risk premium, say Libor+50bp, regardless of the level of overguarantees. Over time, as the market becomes deep and liquid, the risk premia may decline.</td>
<td>Because the structure is complicated, we expect blue bonds to trade at a discount to swaps, or around LIBOR+20bp. Red bonds will be poorly rated for the weaker countries and will trade at a high to very high risk premium.</td>
<td>Pricing between French and German bonds can be achieved.</td>
</tr>
<tr>
<td><strong>Probability of success</strong></td>
<td>Medium if all sovereign debt issuance ceases, otherwise low probability of success. The downgrade of a large AAA issuer would require a large increase in over-collateralisation and is therefore a risk to the success of the structure.</td>
<td>Medium: The downgrade of a large AAA issuer would require a large increase in over-collateralisation and is therefore a risk to the success of the structure</td>
<td>High.</td>
</tr>
</tbody>
</table>
Appendix B: The three Eurobond proposals described in more detail

Option A – SPV-type structure similar to EFSF

This first option builds on the existing structure of the EFSF. A new debt agency called the Euro-Area Borrowing Agency (EABA), with a similar structure to the EFSF, would be set up and given sole or partial responsibility for Eurobond issuance. As explained below, making the EABA the only issuer of Eurozone sovereign debt would be preferable to sharing this responsibility with individual sovereign issuers. We are cognisant of the ongoing debate about the role and scope of the EFSF and recognise that there are a number of possibilities and hybrids that can be explored within the scope of option A.

Sole issuer, contractual commitment to cease single name issuance
If the EABA were made sole issuer, single name sovereign debt issuance would be suspended for a fixed period and all new supply of Eurobills and Eurobonds would go through this new agent. There would be no issuance limits for the EABA; all maturing legacy sovereign bonds of Eurozone countries would be replaced with the new issues from the EABA, thereby avoiding any ‘crowding-out’ effect.

AAA, pari passu with existing debt
New EABA issuance would rank on equal footing with legacy debt, thereby mitigating any threat from the trigger of sovereign CDS. Given the similarities of the structure to that of an SPV, a AAA rating would be essential to attract demand from investors. Also, the fact that almost 90 percent of the Supra/Agency market is rated AAA suggests that it would be difficult to sell large amounts of non-AAA rated bonds. The structure would require considerable over-collateralisation from each country to achieve AAA status.

Increase over-collateralisation, several guarantee
The EFSF has over-guarantees of ‘up to’ 165% but the EABA would be likely to require more for its effective lending capacity to be significant enough. It is proposed that the over-guarantee rate should be at least 200%. The downgrade of a large AAA issuer would require a large increase in over-collateralisation. Several guarantees would apply to EABA issuance, similar to the existing EFSF.

Advantages are speed of implementation, rapid liquidity build-up
Option A offers the potential for rapid implementation, perhaps in as little as one to two years. This is because we envisage no need for a Treaty\(^5\) change, although the proposals would require agreement from the governments of the member countries. A prohibition on single-name issuance would be likely to require Treaty change. This is the reason why under option A, single name issuance would only be suspended as opposed to permanently banned. However, this

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\(^5\) Treaty refers to the treaties of the European Union.
does mean that strong countries would effectively retain the option to withdraw from the structure.

**Challenges include limited borrowing capacity of SPV structure**
Limited efficiency and borrowing capacity are the main challenges to option A, and these themes divided the analysts on the AFME common issuance advisory group. It is likely that Eurobonds would be incorporated in a credit index, which is only about half the size of the sovereign index.

Furthermore, even with the larger over-collateralisation, it could be a challenge to issue a significant amount of SPV debt unless all single-name sovereign issuance were suspended. The size of the Sovereign, Supranational and Agency (SSA) market is approximately EUR700bn (see Exhibit 2) so, with all else being equal, the new supply would quickly represent a large proportion of the Agency market. To ensure strong demand, common bond issuance would have to be protected from having to compete for investors with sovereign supply, hence the proposal to suspend the latter.

**Compromise with limited issuance**
If cutting-off existing issuance is not feasible, a compromise could be reached during the initiation phase whereby Eurobond issuance concentrates on the short-end, leaving the longer maturities to the sovereign issuers. This would build on the 2009 recommendation of AFME/Primary Dealers to consider issuing Eurobills.

The EFSF or new issuing agent could start by issuing only Eurobills, replacing the maturing T-Bills of the individual issuers. Over the next 12 months, EUR620bn T-Bills will mature and these could be replaced with Eurobills yielding close to current swap rates. This is not far from the weighted average rate for the eight countries. Although this would raise borrowing costs for France and Germany, who currently have extremely low funding rates at the front-end of the curve, it should be recognised that in 2010 Italian and German T-Bills traded almost at the same level.

**Pricing and probability of success**
Because of the SPV-like structure, Eurobonds would be expected to trade at a significant risk premium of approximately 50 basis points over the swap curve, representing a concession to the existing secondary market levels. Over time, as the market becomes deep and liquid, the risk premium may decline. We note that EIB and EFSF, both with several guarantees, trade closely together and not far from the levels of EU bonds.

Probability of success would depend on whether competing sovereign issuance were suspended. If all sovereign issuance were to cease, this option would have medium probability of success; if not, it would have a low probability of success.

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6. We do not expect an SPV to be able to sell more than €300-400bn of bonds before running into market capacity constraints.
As stated above, the downgrade of a large AAA issuer would require a large increase in over-collateralisation and is therefore a risk to the success of the structure.

**Alternative idea – guarantees**

An alternative method involves leveraging the EFSF without increasing the current lending capacity. The EFSF would partially guarantee a bond, i.e. the EFSF would cover a certain share of the loss caused by a defaulting country. Providing guarantees against default to the most speculative part of the credit exposure will allow the country to access capital markets at lower yields.

For example the EFSF could guarantee up to 20% of the principal loss incurred on new Italian bonds sold to private investors. We estimate that this would allow Italy to sell 10Y debt at 4.50% while limiting the losses incurred by buyers of the bond. This partial guarantee enables the EFSF to use the limited funding capacity most effectively while attracting private investment. Controlling access to the guarantees and its terms provides a way to ensure adherence to the growth and stability pact. This would result in the creation of ‘quasi-blue bonds’, a mix between option A and option B. Another advantage of this idea is that all individual DMOs would be able to continue issuing debt.

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Option B – fiscal authority, several (capped) liability, 2-tranche structure

This model uses a central fiscal authority, referred to here as the European Debt Agency (EDA) that has the power to tax and spend. It is a natural progression from the EFSF but avoids an SPV-structure, and draws upon the blue-red bond proposals of recent years.

Several guarantee with over-collateralisation
The several guarantees would probably mean that an over-collateralisation of up to 200% is needed, although it has been suggested the structure might also work with somewhat smaller guarantees. Weaker countries tend to borrow more; which would make it challenging to retain a AAA rating unless a high enough over-guarantee were in place. As in option A, the downgrade of a large AAA issuer may require a large increase in over-collateralisation to retain AAA rating. An additional possibility would be to withhold cash buffers from countries that showed insufficient fiscal discipline.

Sole issuer of blue bonds with ‘3% and 60%’ limits
New single-name issuance would be prohibited, except for red bonds. Blue bond issuance would be managed by the EDA. Importantly, annual issuance is capped at the 3% budget deficit/GDP ratio plus the annual refinancing needs for each of the individual Eurozone issuers. Furthermore, issuance is capped when the level of blue bonds issued by an individual country has reached a threshold of 60% of its GDP. Blue bonds would be on equal footing with legacy debt to avoid triggering the sovereign CDS, but senior to red bonds to ensure fiscal discipline so that countries would be incentivised to keep spending under control.

AAA rating for blue bonds at the beginning
In the initial stages, issuance of blue bonds would represent a relatively small proportion of total debt outstanding. With estimated strong investor interest and inclusion in sovereign indices, a AAA rating would be assured. In the long-run it would be possible for the blue bonds to be issued efficiently without the need for a AAA rating. The fiscal authority of the EDA would mean that the issuance would be regarded as sovereign and, as the strength of US and Japanese government markets have shown, AAA sovereign ratings are not imperative.

Red bond issuance permitted but subordinated
For issuance needs above the caps described above, red bond issuance would be permitted on an individual country basis. Issuance in these bonds would be allowed if and when insufficient funds were raised through blue bonds. Red bonds for weaker countries with more challenging fiscal dynamics could have a sub-investment grade rating. Demand for red bonds, could be limited by the fact that the current market for sub-investment grade bonds is relatively small. It

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9 It has been argued that giving the fiscal authority the power to tax and spend may not be absolutely necessary for this option to work. The alternative would require setting up a fiscal authority with its own budget; its debt guaranteed severally by the various governments (with overguarantees). It would be a hybrid between options A and B.
may be difficult to make the assumption that a new market would develop in response to red bond supply. Red bills may be a possibility, although the bill market is also small relative to the bond market. Therefore, the 3% deficit criterion may need to be relaxed in earlier years.

**Advantage is the size of potential issuance**

Blue bonds could be issued in sufficiently large amounts to replace the annual Eurozone issuance of close to €800bn. This would mean a significant liquidity advantage, reflected in a lower risk premium. Another advantage is that blue bonds would be included in sovereign indices.

The stock of blue bonds, however, would take many years to build up to the 60% debt/GDP cap, limiting the need for red bond issuance in the initial years. For example, it is estimated that the first red bonds for Belgium, Italy and Spain would not be issued before 2017, 2018 and 2021 respectively. Germany, France and the Netherlands are unlikely to need to issue red bonds before 2030.

**Challenges relate to the demand for red bonds**

Investor demand for red bonds is unclear, given the limited size of the current sub-investment grade market in Europe. Additionally, there have been investor questions around the legal status of red bonds. We believe that blue bonds would need to be written under English law, while red bonds should be under local law.

Demand for red bonds would depend on the country and circumstances, and investors have suggested it might be difficult for a country to issue red bonds when the 60% cap has been breached. There is also the question of ECB collateral eligibility in open market operations. In the current market circumstances red bonds are accepted but will the ECB accept only blue bonds in the future?

Finally, there may be a moral hazard issue, because of the fact that a high level of issuance of red bonds (especially in the long run, after the 60% target has been breached) coupled with higher interest costs on these bonds, would make the option eventually unsustainable. However, this could be potentially addressed by a supplementary policy framework that enforces fiscal discipline.

**Pricing and probability of success**

Because the structure is complicated, we would expect blue bonds to trade at a discount to swaps, or around LIBOR+20 basis points. Red bonds would be poorly rated for the weaker countries and would trade at a high to very high risk premium, assuming a market can even be found for them. We therefore assign a medium probability of success to this structure.

As in option A, the downgrade of a large AAA issuer may require a large increase in over-collateralisation to retain AAA rating and is therefore a risk to the success of the structure.
Option C – Capped issuance of Eurobonds, with J&S guarantee and junior red bond facility

This model is close to Option B, the biggest difference being that blue bonds would enjoy joint and several guarantees. Red bonds would still be available, but only as a last resort facility. Note that Eurobonds would be credible and viable in this structure only if there is fiscal convergence and significant loss of sovereignty.

Sole issuer of blue bonds, with limits defined in a centralised fiscal process
This option sees the launch of Eurobonds (blue bonds) by a central fiscal authority (European Debt Agency). The fundamental difference from Option B would be that these bonds are jointly and severally guaranteed. Participating countries would be expected to rely heavily on the blue bond facility to cover their funding needs, even more so than under option B. Access would not be limited by automatic triggers in the form of 3% or 60% caps. Instead it would be rationed by capping the funding of any slippage from a centrally agreed national budget deficit. An individual country would therefore have less discretion to issue red bonds.10

Red bond issuance permitted, but only as a last-resort option
Any slippage from the centrally agreed budget deficit would be funded through a punitive domestic and junior red bond facility. The red tranche would not be expected to be tapped in an environment in which all countries manage to stick to the commonly agreed national budget deficit targets. The blue bonds would rank on equal footing with legacy debt but senior to red bonds.

AAA rating for blue bonds at the beginning
The credit worthiness of the structure would be a function of issuance relative to the size of the AAA-rated countries, as well as the fiscal framework that governs access to common (blue bond) funding. The fiscal architecture would need to encourage fiscal discipline. Overspending relative to pre-approved budget plans would therefore be identified early (e.g. on a quarterly basis) and would have to be corrected automatically.

Blue bonds should be AAA-rated as long as the outstanding amount of issuance was small relative to the size of the outstanding bond market. In the long run,

10 A more extreme version of Option C would see uncapped issuance of Eurobonds (blue bonds). There would be only one tranche (blue bonds), i.e. common issuance would be the only source of funding. New single-name sovereign debt issuance would be prohibited (no red bonds). The moral hazard problem inherent in monetary union may only be credibly addressed by surrendering some (ex-ante) fiscal authority. Rationing access to Eurozone funding would be a significant discipline mechanism.

Some discrimination in interest costs between the more and less fiscally “virtuous” may be politically desirable and could be used to guide fiscal policy choices. But penalty rates must not be so high as to weaken the fiscal sustainability of any borrower. Excess interest thereby accrued could be segregated into a reserve fund.
when issuance size has increased significantly, at least a high AA is anticipated. Blue bonds would have a prominent place in EUR sovereign bond indices.

**Advantages - maximum efficiency**
The J&S guarantee would eliminate the need for any other credit enhancement. Indeed, credit enhancements would have to be more credible than the J&S guarantee. Over-collateralisation would also unnecessarily impair the efficiency (lending capacity / borrowing capacity) of the structure. The structure would therefore be the most efficient of the three options. Blue bond issuance is expected to be at least equal to current bill and bond issuance in the eurozone (€800bn + bills). Because issuance of red bonds is not automatic as in option B, the total issuance size of blue bonds relative to red bonds could be larger than under this option. This would increase the potential for a credible reserve currency status for the Euro.

**Disadvantages - Loss of fiscal sovereignty and longer time to implementation**
Because this option entails a relatively large transfer of fiscal power away from the sovereign, the political obstacles are potentially higher than for the other options. They would however be not as high as in an extreme version where domestic (red) bond issuance was forbidden. Still, the J&S guarantee may require a treaty change as well as constitutional changes in some member countries, including Germany. Option C could probably not be ready within three years, or even five years.

**Pricing and probability of success**
Assuming that the architecture credibly compelled Eurozone countries to behave responsibly (via, for example, ex-ante budget approval and rationed access to blue bond funding), blue bond pricing between France and Germany could be achieved. We assign this structure a high probability of success.
The report has benefited from the advice of a dedicated group of experts from 22 AFME sell-side member firms, along with specialists of 8 member and non-member firms from the investor community. Some contributing advisors from the investor community wish to remain anonymous.

**Sell side advisors (AFME members)**

<table>
<thead>
<tr>
<th>Firm</th>
<th>Name</th>
<th>Business Title</th>
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<tbody>
<tr>
<td>Banco Santander</td>
<td>Antonio Villarroya</td>
<td>Head of G10 Economics, Rates &amp; FX Strategy</td>
</tr>
<tr>
<td>Bank of America Merrill Lynch</td>
<td>Ralf Preusser</td>
<td>Head of European Rates Research</td>
</tr>
<tr>
<td>Banca IMI S.p.A.</td>
<td>Sergio Capaldi</td>
<td>Economist &amp; Fixed Income Strategist</td>
</tr>
<tr>
<td>Barclays Capital</td>
<td>Laurent Fransolet</td>
<td>Head of European Fixed Income Strategy</td>
</tr>
<tr>
<td>Banco Bilbao Vizcaya Argentaria (BBVA)</td>
<td>Daniel Navia</td>
<td>Global Head of relationship management - central banks and swfs</td>
</tr>
<tr>
<td>BNP Paribas</td>
<td>Camille de Courcel</td>
<td>Interest Rate Strategist</td>
</tr>
<tr>
<td>Citi</td>
<td>Robert Crossley</td>
<td>Head of European Rates Strategy</td>
</tr>
<tr>
<td>Commerzbank AG</td>
<td>Christoph Rieger</td>
<td>Head of Interest Rate Strategy</td>
</tr>
<tr>
<td>Deutsche Bank</td>
<td>Alexander Düring</td>
<td>Head of Relative Value Research Asia-Pacific</td>
</tr>
<tr>
<td>Credit Suisse</td>
<td>William Porter</td>
<td>Head of European Credit Strategy</td>
</tr>
<tr>
<td>Goldman Sachs</td>
<td>Yakov Sadowski</td>
<td>Macro Structuring and Strategy</td>
</tr>
<tr>
<td>HSBC Bank plc</td>
<td>Steven Major*</td>
<td>Head of Fixed Income Strategy &amp; Research</td>
</tr>
<tr>
<td>ING Bank N.V.</td>
<td>Padhraic Garvey</td>
<td>Global head of Developed Debt and Rates Strategy</td>
</tr>
<tr>
<td>J.P.Morgan Securities Ltd.</td>
<td>Pavan Wadhwa *</td>
<td>Head of Global Interest Rate Strategy</td>
</tr>
<tr>
<td>Morgan Stanley &amp; Co. International plc</td>
<td>Laurence Mutkin</td>
<td>Head of European fixed-income strategy</td>
</tr>
<tr>
<td>Nomura International plc</td>
<td>Desmond Supple</td>
<td>MD and Head of EMEA Research</td>
</tr>
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<td>RBC Capital Markets</td>
<td>Peter Schaffrik</td>
<td>Head of European Rates Strategy</td>
</tr>
<tr>
<td>RBS Global Banking &amp; Markets</td>
<td>Jacques Cailloux</td>
<td>Chief European Economist</td>
</tr>
<tr>
<td>Scotia Capital</td>
<td>Alan Clarke</td>
<td>Fixed Income Strategy</td>
</tr>
<tr>
<td>Société Générale</td>
<td>Vincent Chaigneau *</td>
<td>Global Head of Rates Strategy</td>
</tr>
<tr>
<td>UBS Investment Bank</td>
<td>Justin Knight</td>
<td>Head of European Rates Strategy</td>
</tr>
<tr>
<td>UniCredit</td>
<td>Erik Nielsen</td>
<td>Chief Economist</td>
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**Buy side advisors (AFME members)**

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<th>Firm</th>
<th>Name</th>
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<tr>
<td>APG All Pensions Group</td>
<td>Thijs Aaten</td>
<td>Manager Treasury</td>
</tr>
<tr>
<td>AXA Investment Managers Ltd</td>
<td>Lee Sanders</td>
<td>Asset Manager/senior trader</td>
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</tbody>
</table>

**Buy side advisors (non AFME members)**

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<tr>
<th>Firm</th>
<th>Name</th>
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<tbody>
<tr>
<td>Allianz Investment Management SE</td>
<td>Karl Happe</td>
<td>Head of Fixed Income Strategy</td>
</tr>
<tr>
<td>DWS Investment GmbH</td>
<td>Stefan Kreuzkamp</td>
<td>Director Fund Management</td>
</tr>
<tr>
<td>Norges Bank Investment Management NBIM</td>
<td>Ole Christian Froseth</td>
<td>Head of Treasury and Fixed Income Trading</td>
</tr>
<tr>
<td>UNION Investment</td>
<td>Christian Eckert</td>
<td>MD Head of Fixed Income</td>
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*Chair of the AFME Common Issuance Advisory Group*
The Association for Financial Markets in Europe advocates stable, competitive and sustainable European financial markets that support economic growth and benefit society.

On behalf of our members, we:

- offer a single voice for the European capital markets participants and advocate their views at national, European and global levels;
- develop a constructive dialogue on market and regulatory policy with legislators and regulators;
- contribute policy and advocacy expertise to help achieve a balanced and stable regulatory environment; and
- promote the contribution of the financial sector to society.