

European safe asset

Review of selected proposals from the perspective of a small and open economy

Roman Vasil*

Abstract

The Commission supports the current work of the European Systemic Risk Board on European Sovereign Bond-backed Securities and will present an enabling framework for such securities in spring 2018. This short note evaluates four widely publicized safe asset proposals. We argue that building an institutional framework is crucial for the success of a safe asset. Focusing on the conceptual and technical aspects of these proposals, this note identifies the red/blue bond proposal as the most viable option for a small and open economy such as the Slovak Republic.

Acknowledgement

Special gratitude goes to Peter Palus for the instigated discussion which motivated this work and to Pavol Povala who significantly contributed to the quality of this work with his valuable and accurate comments.

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* Roman Vasil [roman.vasil@mzv.sk]

Introduction

The [reflection paper](#) on the deepening of the European economic and monetary union (EMU) touches upon the creation of a European safe asset which is one of the key unresolved issues in the design of the EMU. Creation of the European safe asset is closely linked to, and cannot be credibly implemented without, the resolution of legacy sovereign and private sector debt. This note discusses four proposals for creating a eurozone-wide safe asset and for addressing the legacy sovereign debt. We focus on the conceptual and technical aspects of these proposals.

It is widely believed that the EMU needs a safe asset akin to U.S. Treasuries. While the need itself is uncontroversial, the way towards creating such an asset remains unclear. Widely publicized proposals, put forward at various stages of the eurozone sovereign debt crisis in 2011–2013, include:

- European Safe Bonds (ESBies) by Brunnermeier et al. (2016)
- Euro Treasury bills by Hellwig and Philippon (2011)
- Red/blue bonds by Delpa and von Weizsäcker (2010)
- Debt redemption fund by Bofinger et al. (2010).

Before going into the specifics of individual proposals, it is useful to look at the current situation in the EMU from a historical perspective and review the U.S. experience in the period when the foundations of the U.S. safe asset had been laid out, see e.g. Sargent (2012) for a detailed treatment. One of the key points from that episode is that the centralisation of fiscal policy (and taxing power) predates the creation of a safe asset. Clearly, there are differences between the U.S. in the 18th Century and the EMU today, but any safe asset proposal that expressly avoids the discussion of at least partial centralisation of taxing power and fiscal policy, is unlikely to succeed in the long-run. Partially centralised taxing power together with the lender of last resort¹ are necessary to remove the discount reflected in prices of government bonds of weaker eurozone countries.

Historical evidence shows that safe assets share the following properties:

1. Persistently lower yield than comparable assets. For illustration, Krishnamurthy and Vissing-Jorgensen (2012) find that yields on U.S. Treasuries are reduced by approximately 70 basis points on average owing to their superior safety and liquidity features.
2. “Negative beta”, i.e. the safe asset appreciates in bad times when risky assets such as equities, riskier sovereign and corporate credit perform poorly.²
3. Sufficient size and high trading liquidity characterized by the ability to trade in large sizes with a minimal price impact.
4. Higher fiscal capacity as manifested by the low sensitivity of yields to debt-to-GDP ratio, see e.g. the historical evidence from the U.S. or the U.K.
5. Endogeneity, which is related to the previous point, ensures that if investors believe that the asset is safe, their trading behaviour makes it safe.

We look at the proposals through the lens of these key properties. Considering these, the European safe asset needs to be sizable from the outset, i.e. a multiple of the size of the German government debt, and its design needs to ensure superior liquidity.

¹ On 6 December 2017, [European Commission published an outline](#) of steps that would lead to the creation of such an entity.

² We use the term beta as a shorthand for the sensitivity of government bond returns to returns on risky assets as proxied by a broad equity index. Safe assets such as U.S. Treasuries or German bunds typically have a negative beta while returns on riskier sovereign debt and corporate bonds tend to be positively correlated with equity returns.

a) ESBies/EJBies

Brunnermeier et al. (2016) suggest using financial engineering to largely circumvent the reforms of the EMU institutions that would be necessary to accommodate a partial centralisation of the taxing power and the fiscal policy. The safe asset would be a result of pooling and tranching the sovereign debt of the EMU member states. The proposal by Brunnermeier et al. (2016) has been presented by the European Commission and the European Systemic Risk Board.

Conceptual issues

- Positive effects of diversification through securitization are most likely overblown—bulk of the debt is going to be issued by a small subset of large eurozone member states with synchronised business cycles
- Investors' demand for the riskier junior tranche is likely to be pro-cyclical. Empirical evidence shows that investors' demand for riskier credit instruments moves with the business cycle, as documented in Erel et al. (2012); Greenwood and Hanson (2013).

Technical issues

- Rating of the senior tranche is likely to be lower than AAA mainly owing to the lack of diversification (max. 19 assets with a substantial correlation). Standard and Poor's suggest a "weak-link" rating approach, i.e. taking the rating of the assets just above the suggested 30 per cent mark for the junior tranche, see Kraemer (2017) for more details.
- Complex pricing, investors need to model correlation of defaults to price the tranches, i.e. model risk which is likely to deter some investors.
- The issuer would most likely need to be a public institution to ensure continuity. It may be that issuance by a private entity is not economical as discussed in J.P. Morgan (2017).
- Pricing of the senior tranche would most likely be similar to the sub-sovereign and agency debt such as KfW or ESM bonds. Pricing of the junior tranche is probably going to be wider than that of peripheral debt. This goes against some of the key features of a safe asset outlined above (liquidity and safety premium).
- It is hard to incentivize banks of a weaker sovereign with relatively high funding costs to hold safe tranches (negative carry).

b) Euro T-bills

The proposal by Hellwig and Philippon (2011) envisages a limited issuance of short-term debt instruments (up to one year) of up to 10 per cent of the eurozone's GDP. These instruments would enjoy joint and several guarantees of the EMU member states while the long-term debt would be managed at the national level.

Conceptual issues

- Owing to a relatively small size, it would not act as a global safe asset. In fact, the size of Euro T-bills would be smaller than the current size of German government debt, which already acts as a safe asset.
- It is a partial solution that does not address the sustainability of long-term debt nor does it resolve the issue of legacy debt.
- Banks need liquid and safe assets to fulfil regulatory requirements across the maturity spectrum, e.g. duration-matching. Same logic applies to other investors who need safe assets across the maturity spectrum.
- Like ESBies, banks in vulnerable countries have no incentives to hold short-term safe bonds while facing higher funding costs.
- Weaker eurozone governments might act strategically and issue euro T-bills irregularly only in times of crisis. From the investor's perspective, a safe asset requires regular and predictable issuance.

Technical issues

- Potential distortions and segmentation of the yield curve caused by sovereign credit risk differential at the short end versus the long-term maturities.³

c) Red/blue bonds

Eurozone member countries pool debt up to 60 per cent of their respective GDP (blue bonds) which are both jointly and individually guaranteed. Any debt in excess of the 60 per cent threshold, the so-called red bonds, is junior to the blue bonds and backed by the sovereign credit. The blue bond market would have a sufficient size, liquidity and quality comparable to the U.S. Treasury debt market.

Conceptual issues

- Sovereign debt capacity varies across eurozone member states, which is not reflected in the design of red/blue bonds. The degree to which each country benefits from the scheme is partly determined by the debt capacity. Related to that is an incentive issue for countries that have high standalone debt capacity.
- Additional issuance in times of crisis might be excessively expensive for the eurozone members at or above the 60 per cent limit. Sovereign bond markets tend to underestimate sovereign credit risk in good times and overestimate the default risk in bad times. Thus, risk that country with relatively high debt could not borrow at the market might substantially increase.

Technical issues

- The fragmentation of national debt leads to lower liquidity of red bonds and thus to their higher cost. Ex-ante, it is not clear whether the higher cost of red bonds would be offset by the lower cost of blue bonds as compared with the status quo.

d) Debt redemption fund

This proposal is an inversion of the red/blue bond proposal in that the debt in excess of 60 per cent of the country's GDP is jointly and individually guaranteed. It therefore deals with the legacy debt.

Conceptual issues

- There is little incentive for EMU members with debt levels below the threshold to participate in the scheme.
- The proposal makes the first step toward creating a safe asset by addressing the issue of legacy debt. While the national debt of weaker eurozone members would become safer, the government bond market would still be fragmented, thus not reaping the full benefits of a safe asset, e.g. safety and liquidity premium.

The perspective of a small and open economy

The Slovak view is shaped by the following characteristics of the national government debt:

1. Slovak debt-to-GDP ratio is well below the 60 per cent limit and is likely to stay below that mark (debt brake).
2. Slovakia is a small economy with an underdeveloped capital market. Thus, it relies heavily on foreign investors to finance its government debt⁴.
3. Slovak government bonds are less liquid than those of larger sovereigns or comparable countries with their own currency. As a result, investors require a sizable liquidity premium for bearing this risk, see e.g. Odor and Povala (2016).

³ Sovereign bonds originally issued as long-term bonds, thus not guaranteed, rolldown the curve and, at some point, have the maturity of less than one year which would qualify them to be guaranteed. If they were not, this would lead to a segmentation effect.

⁴ Foreign investors tend to be less sticky than domestic bondholders, which might contribute to excessive widening of the spread during crises.

While the spread of Slovak government bond yields to German government bonds tends to be relatively low (20 to 70 basis points) in normal times, the spread tends to increase substantially (up to 300 basis points) in times of financial market distress, i.e. Slovak government bonds have a positive beta.

A version of the red/blue bond proposal appears to be the best option from the perspective of the Slovak Republic for the following reasons:

- The size of the blue bond market would be sufficient to act as a global safe asset (comparable to the size of the U.S. Treasury market).
- Should the status quo in the fiscal policy hold, Slovakia would avoid fragmentation of its government bond market (as would most likely be the case for ESBies) and would most likely enjoy the full extent of the liquidity and safety premiums attached to the blue bonds. Our estimate is that it would lead to a reduction in refinancing costs of approximately 50 basis points and, more importantly, lower volatility of refinancing costs by moving from a “positive beta” to a “negative beta” asset.⁵ A large part of the cost reduction would come from eliminating the liquidity premium, which we estimate to be sizable, see e.g. Odor and Povala (2016).

The ESBies proposal appears problematic from the Slovak perspective because:

- It avoids addressing the institutional framework (i.e. some form of centralisation of the fiscal policy) which is necessary for creating the safe asset.
- The Slovak debt management office would need to significantly change the issuance calendar, as the purchases of bonds for securitization vehicles are likely to be unevenly distributed.
- Given that a large chunk of the debt would be bought by the ESBies issuer, the secondary market in government debt would be thin and even less liquid than it is now. It is unlikely that the proposal would lead to a significant reduction of refinancing costs for Slovakia. In fact, it is conceivable that the cost could be higher than it is today.

Conclusion

Creating a European safe asset with all the desirable features listed above could be the best option from the perspective of a small and open economy. In the case of a non-existent political consensus that is necessary for creating the institutional setup supporting the European safe asset, it is probably better to keep the status quo, i.e. keep developing national government debt markets. To achieve at least partially some of the properties of safe assets, a national debt management office would need to have a more active role in improving the liquidity of government bonds and expanding the investor base.

Additional points

- Relying on market discipline to enforce fiscal discipline is unlikely to work in practice. Sovereign bond markets tend to underestimate sovereign credit risk in good times and overestimate the default risk once the first signs of stress are visible. There is plenty of empirical evidence to support this claim, including the period predating the eurozone sovereign debt crisis.⁶ In fact, Cotarelli et al. (2010) show that out of 36 instances with emerging market sovereign bond spreads only seven ended up in actual default.
- If the eurozone members decide to keep the status quo, one option to resolve some of the issues originating from the lack of safe asset, could be to increase the equity capital of banks. For instance, it would address the doom loop which ESBies are designed to solve.

⁵ We assume that after the safe asset is successfully phased in, the refinancing costs of the Slovak government will converge toward German government bond yields.

⁶ One of the reasons behind the market's failure to assess adequately the riskiness of Greek government bonds prior to 2009 were the zero risk weights for highly-rated government bonds under the Basel II requirements.

Open questions

The debate about fiscal discipline tends to be structured around rules-based versus market-based mechanisms. Politics is an often-overlooked aspect in this debate. Governments whose debt is a safe asset have an additional incentive to be fiscally responsible as they are more likely to be rewarded by the electorate for being able to maintain this privilege.

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