PROMETEIA DISCUSSION NOTE N. 10



JULY 2019

A EURO-WIDE SAFE ASSET WHY WE NEED IT AND WHERE WE ARE



Main points

- The absence of a euro-denominated safe asset shared by all members of the monetary union is one of the major shortcomings of the euro area.
- Any shared sovereign asset would entail some risk sharing, for which reason it has so far failed to gain enough political support.
- A second-best possibility would be for the market to issue an asset by pooling and tranching member countries' sovereign bonds.
- However, some regulatory reforms would be a pre-requisite to incentivize its use and the European institutions have already started work on a draft regulation.
- A market-based safe asset could be a step forward in strengthening the euro area's financial stability.

I. Introduction

The absence of a euro-denominated safe asset shared by all members of the monetary union is one of the major shortcomings of the euro area. It implies large movements of liquidity towards the core countries' sovereign bonds at times of tensions, increasing financial fragmentation across the area. It delays the reduction in the home $bi\alpha$ s in sovereign bond holdings by the banking sector, and feeds the adverse bank-sovereign loop. It is also a barrier to the euro becoming a reliable reserve currency worldwide.

Any form of pooling of sovereign bonds managed by a supra-national authority would entail some risk sharing, i.e. the possibility – under some extreme conditions – that some fiscal transfers might be required to honor the supra-national authority liabilities. However, as noted above, the absence of a euro area safe asset poses risks, since in the case of adverse economic conditions financial fragmentation could threaten the viability of the euro, as the sovereign debt crisis of 2011-2012 has proven.

A truly safe asset must have high creditworthiness and be backed by a credible central bank to guarantee its liquidity. No such asset currently exists in the euro area. The ECB can intervene and has intervened in the secondary sovereign bonds markets but may be unable to do so in the case of severe tensions that question the solvency of a sovereign. This is a significant shortcoming. The liabilities issued by a euro area fiscal authority, were one to be established, would benefit from high creditworthiness and the ECB liquidity provision. However, euro area leaders are far from reaching consensus on a euro area fiscal authority with significant borrowing capacity. Recently, the financial ministers have agreed on a common budgetary instrument for the first time. So far all that has been considered is a eurozone budget within the EU budget to promote competitiveness and convergence, without mentioning the stabilization function and how to finance it.

A second-best possibility would be for the market to issue a safe asset by pooling and tranching the sovereign bonds of member countries. This would not involve any fiscal transfer risk. In 2016, the European Systemic Risk Board (ESRB) set up a High-Level Task Force on Safe Assets (HLTF) to assess the merits and feasibility of such an asset, which it called Sovereign Bond-Backed Securities (SBBSs). The HLTF issued a report in January 2018, which stated that a market for SBBSs could reduce the risks to financial stability but noted that the current regulatory framework would not allow its development. Following the HLTF report, in May 2018 the European Commission (EC) adopted a proposal on SBBSs and the European Parliament (EP) recently amended and approved the draft regulation in a first reading.

This note is aimed at providing a general overview of SBBSs. Section II reflects on the motivations for introducing a euro area safe asset. Section III describes the path towards the development of the proposed SBBS scheme. Section IV sets out the main features of SBBSs emerging from the EC proposal and Section V poses some open questions about its implementation. Section VI concludes.

II. A euro area safe asset to strengthen the EMU institutional framework

A still incomplete EMU. Over the last 10 years, some significant steps have been taken towards establishing a Banking Union to address fragmentation risk (Figure 1). However, agreement about other relevant tools to strengthen the EMU is hard to find.⁴

The bank-sovereign doom loop remains unresolved so far. Figure 2 shows that in some countries banks hold significant amounts of domestic government bonds. In the last few years, debate has grown over the possibility of modifying the regulatory treatment of bank sovereign exposure

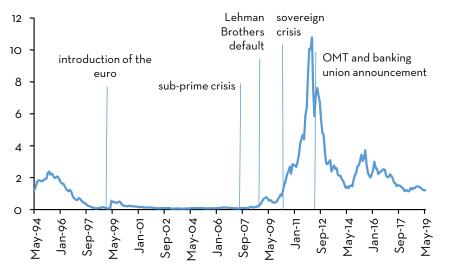


Figure 1
Indicator of financial
integration

standard deviation of 10Y sovereign bonds yields for the 11 main EMU countries

Note: The 11 countries are: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal and Spain. Source: Prometeia's calculations on Thomson Reuters data.

¹ The ESRB is responsible for macro-prudential oversight of the EU financial system and the prevention and mitigation of systemic risk. It includes representatives from the ECB, national central banks and the supervisory authorities of EU member states, and the European Commission.

² ESRB (2018), "Sovereign bond-backed securities: a feasibility study. Volume 1: main findings", January 2018.

³ Proposal for a Regulation of the European Parliament and of the Council on Sovereign Bond-Backed Securities, No. 2018/0171. Further amendments by the European Parliament to this proposal followed in April 2019.

⁴ The Five Presidents Report (2015) - available at https://ec.europa.eu/commission/sites/beta-political/files/5-presidents-re-port_en.pdf - proposed a possible timing for a complete EMU. However, the process is proceeding more slowly than expected.

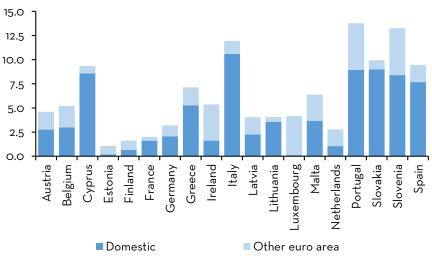


Figure 2

Banks' exposure to domestic and other euro area government debt securities as a percentage of total assets, 2019q1

Source: Prometeia's calculations on ECB data.

(RTSE) to encourage a reduction in the level of this exposure (on this see Prometeia Discussion Note no. 4).⁵ So far, no clear agreement has been reached. A euro area safe asset might allow for diversification and de-risking in banks and other institutions' sovereign portfolios.

Safe assets are becoming scarce. At the end of 2018, the total euro area stock of triple-A rated sovereign bonds (over 80 per cent of which are German bonds) was €50 billion lower than in 2012 (Figure 3). In the same period, total eurozone government bonds increased by €1488 billion. From close to 30 per cent, the share of securities rated as safe fell to 23.4 per cent while the stock of countries' sub-triple-A securities increased by €1539 billion between 2012 and 2018.

The introduction of a euro-wide safe asset would contribute to a more integrated financial market and support the euro as a global currency. A safe asset would contain the financial fragmentation in times of stress when investors fly into AAA sovereign bonds. A safe asset could also serve to construct a common yield curve benchmark for euro area countries and facilitate

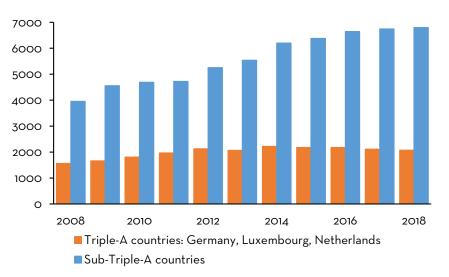


Figure 3

Breakdown of eurozone government securities as rated in 2018

billions of euros

Source: Prometeia's calculations on ECB data.

^{5 &}quot;Completing the Banking Union: next steps and implications for Italy", March 2018. n.4. Available at https://www.prometeia.it/en/research/position-note/archive?uniq=d9bd00910ffe313ad9169b3fcc8544ab.

the ECB's monetary policy, making Member States' financial conditions less dependent on their domestic sovereign markets and stimulating international demand for the euro.

III. How to create a safe asset without mutualization

Debate over the need for a euro-wide bond is far ranging. Since 2009, in the aftermath of the financial crisis, various proposals have been put forward in the pursuit of wider fiscal coordination and cooperation among the euro area countries based on a common safe asset. These different proposals are associated to a range of objectives such as overcoming the crisis, boosting growth, stabilizing macroeconomic cycles, promoting real investment, limiting the risk of defaults, and breaking the bank-sovereign doom loop.

Although a safe asset would provide several benefits, most proposals were not supported by euro area governments. The proposals were rejected in particular by the least vulnerable countries based on their opposition to the mutualization of risks. Most expressed concern that such solutions would further reduce the incentives for fiscal discipline and fail to improve the stability in the area.

The ESBies proposed in 2011 by the Euro-nomics Group are aimed at resolving the problem of the mutualization of risks. ESBies are the senior tranche of a pool of euro area sovereign bonds. They would be issued by a European Debt Agency together with one or two tranches with lower levels of subordination. This proposal is novel in that it provides for a repackaging of existing debt, which requires neither additional funding from Member States nor common liabilities. Moreover, ESBies would allow the creation of a "synthetic form" of secure European federal debt while leaving national debt obligations to the responsibility of each Member State. Since it does not involve any form of mutualization, this proposal has become central to the debate.

In mid-2016 the ESRB set up a HLTF on Safe Assets to assess the feasibility of creating a eurowide safe asset. The analysis focused on the creation of SBBSs inspired by the Euro-nomics Group's proposal. Based on the HLTF findings, the EC proposed a draft regulation to allow the development of a SBBS market.

IV. Design of the SBBSs

SBBSs are securities with various levels of seniority backed by a diversified portfolio of eurodenominated government bonds. SBBSs are defined as αreα-wide and low-risk assets. They are area-wide because they are created by bundling together government bonds from different EMU countries. Their low risk is based on the tranching of the issued bonds into securities with different levels of subordination and, therefore, it applies only to securities with the highest seniority. Subsenior SBBSs would protect the senior tranches by being the first to bear the losses.

The ECB capital key would be used to determine the contribution of each EMU country's sovereign to the overall underlying SBBS portfolio. The SBBSs should be structured in a simple,

⁶ For more details, see ESRB Task-Force Report (2018), Volume I and Leandro, A. and Zettelmeyer, J (2018), "Europe's search for a safe asset", Policy Brief 18-20, Peterson Institute for International Economics, October 2018.

⁷ Brunnermeier, M. K., Garicano, L., Lane, P., Pagano, M., Reis, R., Santos, T., Thesmar, D., Van Nieuwerburgh, S., & Vayanos, D. (2011), European Safe Bonds (ESBies). Available at: www.euro-nomics.com; Brunnermeier, M.K., L. Garicano, P. Lane, M. Pagano, R. Reis, T. Santos, D. Thesmar, S. Van Nieuwerburgh and D. Vayanos (2016a), "The sovereign-bank diabolic loop and ESBies." American Economic Review Papers and Proceedings, 106(5): 508-512.

transparent and standardized way. To this end, the ECB capital key, a proxy for each country's economic size, would be used to fix the portfolio weights. The EC proposal also provides for the possibility of deviating from the capital key by a maximum of 10 per cent of the nominal value of each sovereign debt. Moreover, in the case of too low bond issuances or official financial assistance, the EC would implement a formal action to exclude the sovereign bonds of the relevant Member State from the underlying portfolio and redefine an adjusted capital key.

Other portfolio weights have been considered for SBBSs, including the share of each countries' sovereign debt. Figure 4 shows that these options differ slightly for France, Germany and Italy. However, some suggest that the use of a measure based on government debt could introduce moral hazard issues insofar as countries with increasing levels of debt would benefit from SBBSs.

Senior SBBSs represent low-risk securities, followed by one or more tranches of higher-risk ones. The HLTF suggests that the sub-senior tranche should correspond to 30 per cent of the nominal value of the SBBSs issued. This level of subordination would best resolve the trade-off between the degree of safety of senior SBBSs and their available amount. Moreover, the HLTF findings suggest that an amount equal to 30 per cent -thick junior SBBS could not be absorbed by high-yield investors because of its high-risk profile, therefore further partition of the junior securities would be warranted. The HLTF recommends further division of the subordinated tranche into a 20 per cent -thick mezzanine and a 10 per cent-thick junior tranche.

The HLTF suggests that the maximum market size for SBBSs should be around €1.5 trillion. This amount would have a limited negative impact on sovereign bond market liquidity similar to what occurred during the Public Sector Purchase Program (PSPP) when around €2 trillion of sovereign bonds were purchased by the ECB. In addition, this amount is close to total bank holdings of government debt securities in the euro area. However, the EC proposal makes no mention of a limit on the amount of SBBSs that can be issued.

SBBSs would be issued by Special Purpose Entities (SPEs) created ad hoc, subject to the EU regulation and supervised by the EU institutions. A key aspect of SBBSs is that the cash flows

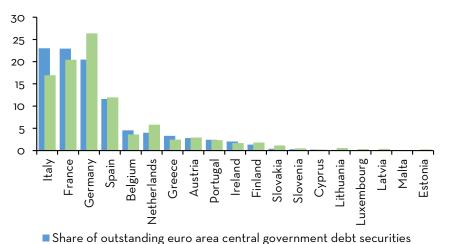


Figure 4
Comparison of suggested
portfolio weights in SBBSs

percentages, 2018q4

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■ ECB capital key among euro area Member States

Note: ECB capital key was last updated on 1/1/2019. Source: Prometeia's calculations on ECB data.

⁸ The capital key is well defined and is updated every five years, or whenever a country joins (or leaves) the EU. The ECB has already adopted the capital key to establish the proportion of each Member State's asset purchases under the Asset Purchase Programme.

SBBSs could be created by the private sector. The HLTF allows the possibility of setting up either a public or a private issuing entity. However, the EC proposal for the regulation of SBBSs explicitly recommends the creation of private SPEs, which would act under the supervision of the European Securities and Markets Authority (ESMA) and another competent authority designated by Member States. One of the main reasons for this is to avoid any risk of fiscal mutualization among Member States, which a public entity would entail. With private SPEs, the SBBSs issuing entities would not be reliant on any form of public paid-in capital or guarantees. Moreover, only the investors would bear the risks and possible losses.

So far, the main obstacle to the creation of SBBSs has been the lack of a regulatory framework reflecting their unique properties. Under current regulation, SBBSs would receive unfavorable treatment with respect to the underlying portfolio of sovereign bonds for which the regulation makes specific provisions. For example, according to the Capital Requirement Regulation (CRR), a risk weight is imposed on securitized positions while a zero-risk weight applies to sovereign bonds. In particular, banks would have no incentive to swap their sovereign bond holdings for SBBSs. This is a major barrier to the development of a demand-led market for SBBSs.

SBBSs have features which make them more similar to sovereign bonds than to securitized products. In particular, they are not subject to many of the risks that apply to standardized securitizations, including opacity of the underlying assets and absence of a market price against which to value them. For these reasons, the HLTF suggests that senior SBBSs deserve to be treated differently from securitized products and more in line with sovereign bonds. On the other hand, to ensure that SBBSs reduce the banks' exposure to sovereign risk, the mezzanine and junior SBBSs regulatory framework should be designed to make it convenient for banks to hold limited amounts of them.

The EC legislative initiative goes in the direction of eliminating barriers to the development of a demand-led market for SBBSs. The proposed regulation allows senior SBBSs to be subject to the same regulatory treatment as the underlying sovereign portfolio. There are no provisions related to sub-senior SBBSs but they will undoubtedly be treated more unfavorably and according to their risk-profile. It should be noted that the proposal does not affect the regulatory treatment of sovereign exposures since this could have implications for the sovereign market, which still need to be assessed.

V. Open questions

Several issues regarding SBBSs need to be assessed. Removing the regulatory obstacles is a first necessary but perhaps not sufficient step to the development of a market for SBBSs. There are several other problems, which might threaten the functioning of SBBSs.

First, the existence of a market for sub-senior SBBSs cannot be assumed. SBBSs are defined as a safe asset in particular because of their underlying seniority structure: 70 per cent senior, 20 per cent mezzanine, and 10 per cent junior. Figure 5 shows that as of October 30, 2016, the yield of

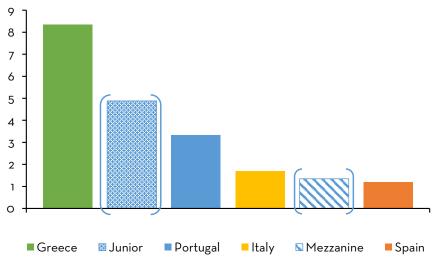


Figure 5

10y sub-senior SBBSs yields
against 10y government
bond yields
percentages, as of 31/10/2016

Source: ESRB High-Level Task-Force Report (2018), Volume II.

the mezzanine tranche would have been similar to low investment grade sovereign bonds such as the Italian and Spanish ones. On the other hand, junior SBBSs would have been as risky as lowerrated corporate and emerging market sovereign bonds (although less risky than Greek bonds).

In the absence of adequate demand for junior SBBSs, the whole SBBS system would fail. There may be sufficient demand for these assets during tranquil periods but not necessarily in crisis periods. In times of crisis, given the higher cross-correlations among countries, sub-senior tranches become even riskier. Based on Brunnermeier et al. (2016b) calculations, Demary and Matthes (2017) show that during the 2011-2012 euro area sovereign crisis the junior tranche would have been far riskier than either the Italian or Spanish sovereign bonds.¹⁰

Second, the introduction of SBBSs may reduce the degree of liquidity of some sovereign bond markets... The shrinking of the secondary market for sovereigns could be especially relevant for countries with low levels of debt. This effect may be avoided by setting a limit on SPEs purchase of each country's sovereign bonds combined with application of the ECB capital key rule. Assuming a SBBS market size of €1.5 trillion and a maximum limit on sovereign purchases of 33 per cent of each country's government securities as proposed by the HLTF, six euro area countries would reach the maximum limit.

...especially if the ECB does not reduce its sovereign bond holdings. The above consideration needs also to account for quantitative easing (QE) purchases, which constitute a relevant share of each country's debt securities. Figure 6 shows that for 10 out of 19 euro area countries the sum of SBBSs and QE purchases would exceed 50 per cent of total domestic securities. In other words, in the absence of a simultaneous balance sheet reduction by the ECB, the marketable government bonds would be more than halved for many countries. The risk of reduced liquidity and a higher term premium would follow.

Third, the EC proposal strictly excludes any modification to the regulatory treatment of sovereign exposures... The RTSE is one of the main reasons for banks holding sovereign bonds. In particular, these assets are not subject to capital requirements, are eligible as liquid assets, and enjoy the smallest haircut when used as collateral. Senior SBBSs would be subject to comparable

¹⁰ Brunnermeier, M., Langfield, S., Pagano, M., Reis, R., Van Nieuwerburgh, S. and Vayanos, D. (2016b), "ESBies: Safety in the tranches", European Systemic Risk Board Working Paper No. 21; Demary, M., & Matthes, J. (2017). "An evaluation of sovereign-backed securities (SBSs): Potentials, risks and political relevance for EMU reform" IW policy paper No. 12/2017.

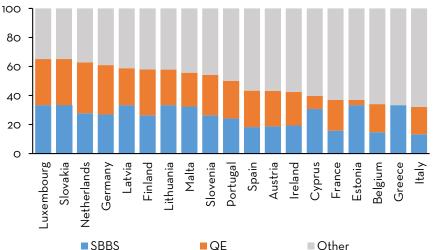


Figure 6

Breakdown of government securities assuming a SBBS market of €1.5 trillion*

percentage shares of total

*A limit of sovereign purchases of total government securities is set at 33%. Source: Prometeia's calculations on ECB data.

treatment and then would become valid substitutes for existing safe assets. Banks located in riskier countries could have an incentive to replace their sovereign holdings with senior SBBSs, provided that they are willing to accept reduced profitability. However, what matters is whether banks in the safest countries would do the same. High-rated domestic securities could provide a higher yield than senior SBBS without any penalty in terms of riskiness and capital and liquidity requirements (Figure 7).

...but a political consensus on this issue has yet to be achieved. Some HLTF members argue that a comprehensive RTSE reform is necessary to stimulate the development of a market for SBBSs. From this perspective, equal treatment of SBBSs and sovereign exposures does not guarantee a demand for SBSSs.

RTSE reform would create tensions in the sovereign bond market but cannot be excluded as a possibility in the foreseeable future. The current prevailing objective is to avoid the creation of any tension in the sovereign bond markets. However, in the future, the possibility cannot be excluded of implementing a RTSE reform to facilitate the development of the SBBS market.

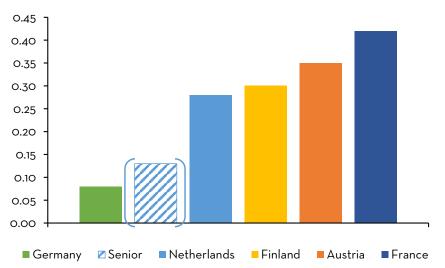


Figure 7

10y senior SBBSs yields
against 10y government
bond yields
percentages, as of 31/10/2016

Source: ESRB High-Level Task-Force Report (2018), Volume II.

VI. Summing up

By addressing the home-bias and increasing the supply of safe assets, SBBSs would contribute to completion of the European Banking Union. SBBSs could contribute to a weakening of the bank-sovereign loop and address the home-bias issue. At the same time, SBBSs could satisfy the increased market demand for safe assets. Overall, SBBSs could represent a step towards improved euro area economic and financial stability and pave the way to completion of a full European Banking Union.

Private SPEs would seem appropriate to issue SBBSs since they should not entail any form of fiscal mutualization among Member States. A public sector issuing entity, that is one supported by public funding no matter how limited, would require a certain degree of political will among Member States which currently is missing.

The first obstacle to the creation of SBBSs is the lack of a regulatory treatment, which reflects their unique properties. Under the current framework, SBBSs would receive an unfavorable treatment compared to sovereign bonds. Although the EC proposal would help to align the regulatory treatments of senior SBBSs and sovereign holdings, further assessment will be needed to understand whether this would be enough to create sufficient demand for SBBSs.

A number of issues remain to be clarified to achieve a better understanding of the implications of SBBSs. First, it remains unclear whether there would be adequate demand for junior SBBSs, especially in times of turmoil when contagion risks are higher. Second, the introduction of SBBSs potentially might affect the degree of liquidity in sovereign bonds secondary markets depending on the number of SBBSs issued. Finally, it remains to be understood how SBBSs would be framed with respect to other policy initiatives such as review of the regulatory treatment of sovereign exposures discussed by the Basel Committee."

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¹¹ Basel Committee on Banking Supervision (2017), "The regulatory treatment of sovereign exposures - a discussion paper", December 2017.