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How safe is a safe asset? Paul De Grauwe and Yuemei Ji

Summary

The European Systemic Risk Board proposes to create a "safe asset" for the eurozone that is based on a repackaging of the risks of sovereign bonds. The hope is that this financial engineering will stabilise an otherwise unstable system of sovereign bond markets in the eurozone. We argue that a financial system that is fundamentally unstable cannot be stabilised by financial engineering. The ESRB-proposal creates the illusion that the sovereign bond markets in the eurozone can be stabilised without the need to share the risk among sovereigns. We argue that sovereign bond markets can only be stabilised via risk sharing. This in turn necessitates further budgetary union and thus also political union.

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ne thing we have learned from the financial crisis is that financial markets cannot be trusted as a disciplining device. During the boom years prior to the crisis, euphoria dominated in financial markets, blinding consumers, banks, firms and investors to the risks. As a result, and encouraged by equally euphoric rating agencies, they took on massive amounts of debt, disregarding the risks they took on their balance sheets. This was the time when financial markets considered Greek sovereign bonds to exhibit the same risk as German sovereign bonds. Financial markets were an engine of indiscipline.

When the crash came, financial markets panicked. Suddenly they detected risks everywhere, forcing consumers, firms and governments into excessive austerity thereby deepening the recession (De Grauwe and Ji, 2013).

All this is not new. Those who are interested in economic history and read deceased economists (Kindleberger, 1978 and Minsky, 1986) have known for some time that financial markets almost never apply the right amount of discipline (see also Lo, 2012). During booms, markets apply too little discipline and thereby amplify the boom, and during recessions they impose too much discipline. thereby making the downturn worse.

It is therefore surprising that a number of economists and officials have recently proposed different schemes aiming at using financial markets to impose the right amount of discipline in the eurozone. A group of French and German economists has proposed different schemes such as sovereign bankruptcy procedures and triggers that would force governments to issue different tranches of debt in the hope of garnering the disciplining powers of the markets (Bénassy-Quéré, et al., 2018). The European Systemic Risk Board (2018) published a report containing a proposal to create a "safe asset" for the eurozone that is based on a repackaging of the risks of sovereign bonds. The hope is that this financial engineering will stabilise an otherwise unstable system of sovereign bond markets in the eurozone.

In this contribution, we wish to focus on the latter proposal of creating a "safe asset". We will argue that a financial system that is fundamentally unstable cannot be stabilised by financial engineering.

Let us first describe the nature of the instability of the government bond markets in a monetary union (see De Grauwe, 2011 and De Grauwe and Ji, 2013). We then analyse whether this proposal of creating a safe asset will succeed in stabilising government bond markets in the eurozone.

1. Fragile sovereign bond markets

The instability of the sovereign bond markets in the eurozone can be described as follows. National governments in a monetary union issue debt in a currency that is not their own, but one that is equivalent to a foreign currency. As a result of this lack of control over the currency in which the bonds are issued, these governments cannot guarantee that the bondholders will always be paid out at maturity. This contrasts with governments of countries issuing their own currency. These governments can give a full guarantee to the bondholders because they know that the central bank stands ready to provide liquidity in times of crisis. All this leads to a situation in which government bond markets in a monetary union can be hit by self-fulfilling crises: investors distrusting the capacity of a government to continue to service its debt sell the bonds, thereby raising the yields and making it more difficult for that government to rollover its debt. A liquidity crisis erupts which results from a fear that the government will be hit by a liquidity crisis. This usually happens during recessions when budget deficits and government debts increase automatically. Investors will then single out those governments perceived to be most at risk, sell their bonds, and acquire bonds issued by governments perceived to be less risky. As a result, massive capital flows across the borders of the monetary union are set in motion destabilising the whole system. This is exactly what happened during the sovereign debt crisis of 2010-12.

The instability of the government bond markets in a monetary union is aggravated by a possible doom loop between the banks and the sovereign. When banks are in trouble, the sovereign, which is obliged to save the banks, will also be hit by a liquidity and possibly a solvency crisis. This was the problem of Ireland. The reverse can also happen: a sovereign debt crisis leads domestic banks, holding large amounts of domestic sovereign bonds, into illiquidity and insolvency (the Greek problem). The doom loop amplifies a sovereign debt crisis. That does not mean, however, that sovereign debt crises and the ensuing destabilising capital flows cannot erupt in the absence of a banking crisis.

2. The quest for a safe asset

The proposal to create a safe asset in the eurozone explicitly aims at eliminating these destabilising capital flows across the borders of the monetary union and to stabilise the system. Will it do this? That is the question to which we now turn.

In contrast with earlier proposals to create Eurobonds (see De Grauwe and Moesen, 2009 and Delpla and von Weizsäcker, 2010), which assume that participating governments are jointly liable for the service of the national debts, the "safe asset" proposal makes no assumption of joint liability. Instead, in this proposal individual governments are individually liable for their own debt. There is no pooling of risks.

The "safe asset" is created when financial institutions (private or public) buy a portfolio of national government bonds (in the primary or in the secondary markets) and use this portfolio as a backing for their own issue of bonds, called "sovereign bond backed securities" (SBBS). The



latter have the following characteristics. One tranche, the junior tranche, is risky. When losses are posted on the underlying portfolio of government bonds the junior tranche takes the hit.¹ The second tranche, the senior tranche, is safe. The proponents of these SBBSs take the view that a 30% junior tranche is large enough as a buffer to take potential losses on the underlying sovereign bonds so as to make the senior tranche (70%) risk-free. Based on simulations of underlying risk patterns, the authors claim that their proposal will allow to more than double the size of safe assets in the eurozone. In addition, they claim that the existence of SBBSs will replace the destabilizing capital flows across national borders in the eurozone by a movement from the risky asset (the junior tranche) into the safe asset (the credit tranche), thereby eliminating the instability in the eurozone.

3. How safe is the safe asset?

How likely is it that these SBBSs will help to stabilise the eurozone? Note that in the way we formulate the question we do not dispute that in normal times the creation of a safe asset may not increase the efficiency of the financial system in the eurozone. It probably will do so by supplying a new type of asset that can provide for a better diversification of normal risks. The issue is whether the safe asset will be an instrument for dealing with systemic risks in times of crisis? Our answer is negative for the following reasons.

First, the creation of a safe asset does not eliminate the national government bond markets. This is recognised by the proponents of a safe asset (see ESRB, 2018 and Brunnermeier et al., 2016). In fact, these proponents have made the continuing existence of national sovereign bond markets a key component of their proposal. According to the ESRB "the SBBS issuance requires price formation in sovereign bond markets to continue to be efficient" (p.33). The markets for sovereign bonds must remain large enough so as to maintain their liquidity. That is also why the ESRB proposes to limit the total SBBS issuance to at most 33% of the total outstanding stock of sovereign bonds.

This constraint on the issue of SSBS implies that national sovereign bond markets will be "alive and kicking". As a result, the major problem that we identified earlier, i.e. the potential for destabilizing capital flows across the borders of the monetary union will still be present. However, since the markets of sovereign bonds will have shrunk the yields are likely to be more volatile during crisis periods.

Second, we observe that during crises, the correlation pattern of yields changes dramatically. Yields in high risk assets get highly positively correlated reflecting the dynamics of contagion. At the same time as investors are looking for safe havens, the yields in the safe assets tend to decline sharply and become negatively correlated with the high-risk yields. This pattern was

¹ In the ESRB(2018) proposal this tranche is split further into two tranches, a junior tranche proper with the highest risk (10%) and a mezzanine tranche (20%) which takes the losses after the junior tranche has been depleted.



very pronounced during the sovereign debt crisis of 2010-12.² We show this feature in appendix. We find that during the sovereign debt crisis of 2010-12, the government bond yields of the periphery countries under stress were highly positively correlated. At the same time these yields were negatively correlated with the yields of the core (safe) countries like (Germany, Finland, France and the Netherlands).

The implication is that during crises it is very unlikely that the credit tranche in the SBBS can maintain its status of safe asset. It will consist of bonds investors dump and "safe-haven" bonds. The credit tranche will continue to depend on the cash flow generated by bonds that panicking investors deem to be extremely risky. The perception that this credit tranche is equally safe as the safe-haven sovereign bonds (e.g. German bonds) is very unlikely when markets are in panic mode. As a result, it is also likely that investors will flee the credit tranches of the SBBS to invest in the "real thing", i.e. super safe sovereign bonds.

A third problem is related to the previous one. During normal times, the safe asset will have been used in the pricing of derivatives and other financial instruments and it will be an important part of the repo market providing liquidity in that market. As a result, a large part of the financial markets in the eurozone will depend on the perceived safety and liquidity of the SBBS construction. During crisis periods, the safety of that construction is put into doubt (as we argued in the previous section), liquidity will tend to disappear and the whole financial sector of the eurozone will be at risk. And in the end, we may have more rather than less financial stability.

4. Conclusion

We have argued that the ESRB proposal to create a safe asset for the eurozone, while useful in normal times, does not eliminate the inherent instability of the sovereign bond markets in a monetary union. During crises, this instability becomes systemic and no amount of financial engineering can stabilise an otherwise unstable system.

There is an historical analogy here. CDOs (collateralised debt obligations) were created during the boom years, backed by different types of securities, e.g. mortgages. At the time, many people were enthusiastic about them and believed that CDOs would make the financial markets more efficient by a better spreading of risks. Ultimately, it was believed, this would lead to more financial stability. The SBBS proposed by the ESRB has the same CDO structure as the previous ones. It would be surprising that financial engineering, which in the past failed dismally in stabilising financial markets, would do so in the future.

The stabilisation of the eurozone goes through two mechanisms. The first one is the willingness of the ECB to provide liquidity in the sovereign bond markets of the eurozone during times of

² In their simulations of the risks involved in SBBSs Brunnermeier et al. (2016) take into account the fact that risk scan be correlated. However, this correlation pattern is fixed, while during crisis periods correlation patterns change dramatically, as argued here.



crisis. The ECB has set up its programme of Outright Monetary Transactions (OMT) to do this. However, OMT is loaded with austerity conditions, which will be counterproductive when used during recessions (which is when crises generally occur). That is why a second mechanism is necessary. This consists of creating Eurobonds that are based on joint liability of the participating national governments. Without such joint liability, it will not be possible to create a common sovereign bond market. The creation of such a common bond market is the *conditio sine qua non* for long-term stability the eurozone.

The political willingness to go in this direction, however, is non-existent today. There is no willingness to provide a common insurance mechanism that would put taxpayers in one country at risk of having to transfer money to other countries. Under those conditions the sovereign bond markets in the eurozone will continue to be prone to instability.

The danger of the "safe asset" proposal is that it creates a fiction allowing policy-makers to believe that they can achieve the objective of stability by some technical wizardry without having to pay the price of a further transfer of sovereignty.

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Annex: Correlation of yields before, during and after the crisis

| | Germany | Finland | Netherlands | Austria | France | Belgium | Italy | Spain | Ireland | Portugal | Greece |
|-------------|---------|---------|-------------|---------|--------|---------|-------|-------|---------|----------|--------|
| Germany | 1.00 | | | | | | | | | | |
| Finland | 0.97 | 1.00 | | | | | | | | | |
| Netherlands | 0.97 | 1.00 | 1.00 | | | | | | | | |
| Austria | 0.94 | 0.99 | 0.99 | 1.00 | | | | | | | |
| France | 0.98 | 1.00 | 1.00 | 0.99 | 1.00 | | | | | | |
| Belgium | 0.95 | 1.00 | 0.99 | 1.00 | 0.99 | 1.00 | | | | | |
| Italy | 0.89 | 0.97 | 0.96 | 0.99 | 0.96 | 0.98 | 1.00 | | | | |
| Spain | 0.94 | 0.99 | 0.99 | 1.00 | 0.98 | 1.00 | 0.99 | 1.00 | | | |
| Ireland | 0.61 | 0.78 | 0.76 | 0.83 | 0.74 | 0.81 | 0.88 | 0.83 | 1.00 | | |
| Portugal | 0.90 | 0.98 | 0.97 | 0.99 | 0.96 | 0.99 | 0.99 | 0.99 | 0.87 | 1.00 | |
| Greece | 0.68 | 0.83 | 0.82 | 0.87 | 0.80 | 0.86 | 0.92 | 0.88 | 0.96 | 0.91 | 1.00 |

Table A1. Correlation of yields before crisis (2000M1-2009M12)

Table A2. Correlation of yields during crisis (2010M1-2012M09)

| | Germany | Finland | Netherlands | Austria | France | Belgium | Italy | Spain | Ireland | Portugal | Greece |
|-------------|---------|---------|-------------|---------|--------|---------|-------|-------|---------|----------|--------|
| Germany | 1.00 | | | | | | | | | | |
| Finland | 0.98 | 1.00 | | | | | | | | | |
| Netherlands | 0.99 | 0.99 | 1.00 | | | | | | | | |
| Austria | 0.89 | 0.93 | 0.91 | 1.00 | | | | | | | |
| France | 0.83 | 0.89 | 0.87 | 0.98 | 1.00 | | | | | | |
| Belgium | 0.45 | 0.58 | 0.54 | 0.74 | 0.80 | 1.00 | | | | | |
| Italy | -0.66 | -0.57 | -0.58 | -0.34 | -0.21 | 0.28 | 1.00 | | | | |
| Spain | -0.62 | -0.60 | -0.55 | -0.48 | -0.34 | 0.02 | 0.81 | 1.00 | | | |
| Ireland | 0.16 | 0.24 | 0.24 | 0.28 | 0.38 | 0.68 | 0.38 | 0.44 | 1.00 | | |
| Portugal | -0.62 | -0.52 | -0.54 | -0.32 | -0.19 | 0.29 | 0.88 | 0.73 | 0.54 | 1.00 | |
| Greece | -0.82 | -0.79 | -0.78 | -0.62 | -0.50 | -0.13 | 0.81 | 0.81 | 0.23 | 0.85 | 1.00 |

Table A3. Correlation of yields after crisis (2012M10-2017M12)

| | Germany | Finland | Netherlands | Austria | France | Belgium | Italy | Spain | Ireland | Portugal | Greece |
|-------------|---------|---------|-------------|---------|--------|---------|-------|-------|---------|----------|--------|
| Germany | 1.00 | | | | | | | | | | |
| Finland | 1.00 | 1.00 | | | | | | | | | |
| Netherlands | 1.00 | 1.00 | 1.00 | | | | | | | | |
| Austria | 1.00 | 0.99 | 1.00 | 1.00 | | | | | | | |
| France | 0.99 | 0.99 | 0.99 | 0.99 | 1.00 | | | | | | |
| Belgium | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 1.00 | | | | | |
| Italy | 0.92 | 0.91 | 0.92 | 0.93 | 0.95 | 0.95 | 1.00 | | | | |
| Spain | 0.90 | 0.90 | 0.90 | 0.92 | 0.92 | 0.94 | 0.97 | 1.00 | | | |
| Ireland | 0.93 | 0.93 | 0.93 | 0.95 | 0.95 | 0.96 | 0.97 | 0.99 | 1.00 | | |
| Portugal | 0.78 | 0.78 | 0.79 | 0.82 | 0.83 | 0.85 | 0.93 | 0.93 | 0.92 | 1.00 | |
| Greece | 0.31 | 0.31 | 0.31 | 0.35 | 0.34 | 0.38 | 0.45 | 0.58 | 0.55 | 0.57 | 1.00 |

Source: European Central Bank

Note: The yields are yields on 10-year government bonds.





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