

Daniel Gros

Banking Union with a Sovereign Virus

The Self-serving Treatment of Sovereign Debt

Despite the experience of the ongoing sovereign debt crisis, European banks continue to hold large amounts of bonds from their home governments. This ties the fates of the sovereign and the banks together, leading to the disruptive self-reinforcing feedback loops that brought the euro area to the brink of collapse. This article addresses how banks can be weaned off of their massive investments in their home government's bonds.

The purpose of the proposed banking union is to de-link banks from their sovereigns. The Single Supervisory Mechanism (SSM) should take care of the tendency of national supervisors not to recognise problems at home. Although the ECB will directly supervise only a limited number of large banks, it will also have a *droit de regard* over the rest of the banking system. This should make it much more likely that bubbles and other threats to the systemic stability of the banking system will be recognised earlier. It is also widely recognised that the SSM requires an SRM (Single Resolution Mechanism). The details of the SRM are still to be designed, but it should contain a common resolution fund which would ensure that any problems that might arise no longer threaten the solvency of the national government, as happened in Spain and Ireland.

Establishing the SSM and the SRM is certainly useful to sever the doom loop between the sovereign and the banks. But this is not enough. Any country that experiences a large-scale banking crisis will also have a very weak economy. This implies that government revenues will fall and expenditure on unemployment compensation will increase. Banking crises almost inevitably lead to large public deficits. This means that the finances of a government with a banking crisis will come under pressure even if a large part of the direct costs of the banking crisis is borne at the Union level through the mechanisms of a banking union. Under these circumstances, it is likely that the risk premia on public debt will also increase and that there will be natural pressure on the banks in the country to become the buyers of last resort of the national public debt. The ECB will have no legal instrument to pre-

vent this from happening, and it will at any rate not be the supervisor for the many smaller banks that might assume this role. But once local banks have accumulated large amounts of the national debt, the fate of the sovereign and the banks becomes linked again, leading to the disruptive self-reinforcing feedback loops that brought the euro area to the brink of collapse.

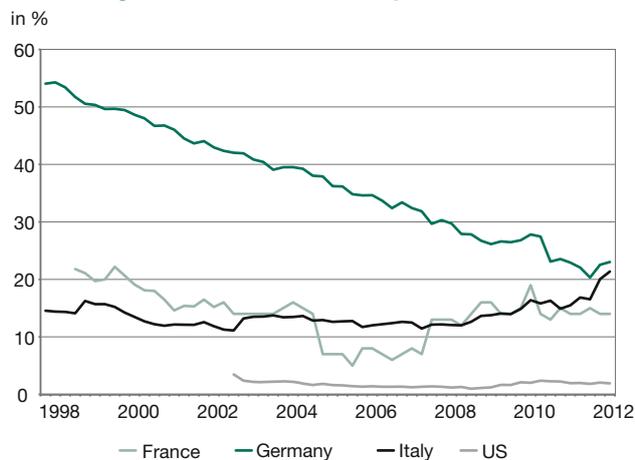
The objective of de-linking banks from their sovereign will thus not be achieved if banks continue to hold massive amounts of the debt of their own country. De-linking banks from their own sovereign should be in the interest of all policy makers because it would make the financial system more stable. However, it should be particularly in the interest of the creditor countries, because market discipline can be effective only if the system is stable. The rescue operations for Greece (and other countries) were motivated by the fact that the prospect of a sovereign default had destabilised the entire euro area banking system. This would not have been the case if banks throughout the euro area had not held massive amounts of sovereign debt on their balance sheets.

This contribution discusses a number of regulatory incentives for banks to hold government bonds – the most important of which is specific to the euro area. These incentives apply to banks in all countries, but most of the time the interest rate on government assets is lower than that of other assets, and it is also often lower than the cost of refinancing for the banks themselves, thus limiting banks' interest in holding government bonds. However, during the euro crisis, the return on some government bonds was much higher than the refinancing cost for banks. This provided a very strong additional incentive for banks in some countries to increase their sovereign exposure.¹ It is thus not surprising that in many eurozone countries,

Daniel Gros, Centre for European Policy Studies (CEPS), Brussels, Belgium.

¹ V. V. Acharya, S. Steffen: The "Greatest" Carry Trade Ever? Understanding Eurozone Bank Risks, University of Virginia, 18 November 2012.

Figure 1
National government debt held by domestic banks



Sources: Agence France Trésor, Bundesbank, Bank of Italy, US Federal Reserve.

domestic banks often hold more than 20% of domestic public debt – much more than in the US, where banks do not hold significant amounts of government bonds. This relative concentration of public debt on bank balance sheets is not just a result of the euro crisis, as can be seen from Figure 1, which shows that in France and Italy, domestic banks have always held considerable portions of total public debt. The data for Germany are surprising, as they show that in the not-so-distant past, more than half of the total national debt was held by German banks. This might be partially due to the fact that a large part of public debt originates with the *Länder* and communes, which in general do not issue bonds but obtain loans directly from the banking sector (especially the local savings and loans). However, since the creation of the euro, the German banking system has diversified its holdings of government debt.

How could euro area banks be weaned off of massive investments in government bonds? This paper analyses four elements of banking regulation which need to be addressed:

1. The risk weights (on sovereign debt) should not be kept at zero. The new risk weights do not have to be large, but they should be based on objective criteria rather than ratings.
2. Large banks (de facto all those under direct ECB supervision) should not be allowed to cherry-pick by discarding their own risk models for sovereign exposure (which allows them to benefit from the zero weight in the standard approach).

3. Liquidity requirements should not force banks to hold only government bonds, as there are enough other liquid assets available.

4. Diversification is more important than risk-weighting for sovereign exposure; this problem can be addressed by applying “large exposure” rules to sovereign debt.

Recognising the riskiness of national sovereign debt in a monetary union

The case of Greece has shown that sovereign debt can no longer be regarded as riskless in the euro area. Banks experienced large losses from holding Greek sovereign debt that, from a regulatory standpoint, had been classified as riskless. These banks thus were not obliged to hold any capital to cover these losses. It is of course to be hoped that the Greek Private Sector Involvement (PSI) remains a “unique and special case”, but this is by no means certain. Moreover, the ESM Treaty explicitly foresees the possibility of private-sector restructuring should a future debt sustainability analysis show that the country cannot service its debt in full. There is thus no reason to continue with the regulatory fiction that sovereign debt is always riskless.

The standard objection to risk weights on sovereign debt is that they contradict fundamental principles on which the Basel capital adequacy regime is based. It is indeed true that all Basel accords have stipulated that banks do not necessarily have to hold any capital against claims on their own government (and in their own currency) because such government debt is regarded as riskless.² The rationale for zero risk weights under normal conditions (i.e. the country has its own national currency) is clear: when a country has its own currency, the government can, *in extremis*, always order the central bank to print enough money to be able to service its debt. This might create inflation, but the government should always be able to pay its debt on time (at least in nominal terms). Under the “nominal” principle applied almost everywhere, such debt should thus be riskless. However, this is no longer valid in the euro area, where the debtor government has no authority over the creation of money. The ECB is actually forbidden to provide monetary financing to any government or even to EU authorities. When monetary and fiscal authorities are separate entities, as in the euro area,

² Prominent representatives of the Bank for International Settlements have emphasised that the zero rating of sovereign exposure within the euro area also contradicts the spirit of the Basel accords, which are based on the principle that capital requirements should be related to the effective underlying risk of an exposure rather than formal criteria. See H. Hannoun: Sovereign risk in bank regulation and supervision: Where do we stand? Bank for International Settlements, Speech at Financial Stability Institute High-Level Meeting, Abu Dhabi, 26 October 2011.

default risk on sovereign debt is not zero. This was the intellectual mistake made when the Basel rules were transcribed into EU law (i.e. the Capital Requirements Directive, or CRD),³ which says that for any bank in the euro area the risk weight of any sovereign exposure denominated in euros is zero. This should be changed.

But on what basis should one determine the risk weights on sovereign debt in the euro area? It does not make sense to treat governments like corporate institutions, because governments after all retain the power to tax. From a financing point of view, governments are actually in a similar situation to banks because they have liabilities (public debt) whose maturities are usually much shorter than their assets, which consist essentially of the present value of future tax revenues.

Under the normal Basel rules, most risk weights are based on the ratings of the three globally recognised ratings agencies (Standard & Poor's, Moody's and Fitch Ratings). However, the euro crisis has shown that these ratings often follow events rather than serve as a leading indicator of problems. Moreover, certain ratings categories (e.g. junk) lead to cliff effects as many investors have similar minimum ratings requirements. This is why a reliance on ratings risks creating a self-reinforcing effect. For example, once the debt of a government has been rated "junk", few investors can still hold the debt, which in turn will make market access close to impossible and could thus provoke a crisis by itself.

It would therefore be better to make risk weights on government debt a function of objective factors (debt/deficit), rather than ratings. For example, the risk weight could remain at zero if both debt and the deficit as a percentage of GDP remain below 60% and 3% respectively; the risk weight would then be increased if either the deficit or the debt ratio exceeds the reference values of the Stability and Growth Pact (or the Fiscal Compact). For example, the risk weight could be increased by 30 percentage points for each GDP point of an excessive deficit that persists for a number of years. Alternatively, the risk weight could be set equal to the amount that the debt-to-GDP ratio of the country concerned is above the 60% threshold level.

³ The legal fiction employed when the euro was introduced was simply to argue that from a legal point of view the euro became the domestic currency of all participating member states in EMU. The economic reality was (and remains) of course the opposite, in the sense that the euro is not under the control of any individual member state, but the legal fiction was attractive because it provided member states with cheaper access to funding.

One has to keep in mind that even a risk weight of 100% means only that the bank has to hold the "full" 8% of capital against this risk. The formula proposed here would thus imply that the risk weight of a country whose deficit is 1% of GDP above the permitted level (e.g. of the Fiscal Compact) would increase from zero to 30%. But this would mean "only" that the banks would have to hold more capital equal to $0.3 \times 8\%$, equivalent to 2.4% of their exposure to this country. Even with a cost of capital for banks of 25%, this would imply an increase in funding costs of 60 basis points. This approach would thus lead to higher borrowing costs and represent a real deterrent, but it should not provoke a crisis because the data on deficits (and even more debt) changes only slowly over time. This implies that relating risk weights to these objective factors should be much less destabilising than linking them to ratings (as is done in the haircut rules of the ECB), which sometimes jump by several notches within very short periods of time.

In addition, the risk weights should be linked to the stages of the excessive deficit procedure (EDP), e.g. when the procedure is initially launched, the risk weight would be increased by a certain amount (say, 20 percentage points). For each additional stage the EDP is ratcheted up, the risk-weighting would be increased further. This would endow the EDP with real teeth to induce reforms even without resorting to the need to impose fines. The ECB could of course adopt a similar tactic for the haircuts it imposes on sovereign debt in its collateral framework.

Introducing positive risk weights for government debt will not be enough to prevent a crisis because of the "lumpiness" of sovereign risk. Experience has shown that sovereign defaults are rare events, but the losses are typically very large (above 50%) when default does occur. In many peripheral countries, banks hold sovereign debt equal to (or greater than) their total capital. Even with a risk weight of 100%, these banks would only have sufficient capital reserves to cover losses of 8%. Risk weights would thus have to become extremely high before they could protect banks against realistic default scenarios in case another PSI materialises. This suggests that the more important aspect is diversification, which will be discussed below.

Obscure but important: permanent partial exemption

This term refers to one of the many wrinkles in the way the EU has implemented the Basel agreements on banking regulation in its own Capital Requirements Directive. This exemption is contained in Article 145 of the Regulation accompanying the CRD on the "Conditions for permanent partial use" and says that banks which use the internal risk models (so-called IRB banks) to calculate the risk-

ness of their assets may not use their internal risk models for sovereign exposure.

This seemingly secondary exemption is in reality crucial.⁴ Most large banks use their internal risk models to calculate the riskiness of their lending to households and the corporate sector as well as of their other assets. By doing so they can generally arrive at a lower level of capital requirement than under the so-called standardised approach under which all lending falls in certain risk classes determined by rating levels. However, these internal risk models must use objective indicators to assess risk, for example past levels of losses or market prices like the cost of insuring against the default of a counterparty as expressed in the price of a credit default swap (CDS) contract. The problem is that in many cases no objective indicator of the riskiness of government bonds would indicate a strictly zero risk. This implies that banks which use the IRB model would thus have to hold capital against their sovereign exposure (at least for those sovereigns for which the CDS prices are not very close to zero). But this EU regulation allows banks to cherry-pick how they measure their risk: for sovereign exposure, banks can use the so-called standardised approach, which, as explained above, assigns a risk of zero to all government bonds of euro area countries if they are denominated in euros.

It is clear that this so-called permanent partial exemption represents an anomaly. It is especially likely to be allowed in the countries under financial pressure where the government relies on the local banking system.⁵ The question is who will decide in the future whether banks can continue to rely on this loophole. The Regulation states that the “competent authorities” have to permit the use of this exemption. But unfortunately it is not clear whether this term refers to the regulators or the supervisors. If competent authorities here is taken to refer to the regulators, nothing much will change even with the establishment of the SSM, since the regulators will remain national. However, if competent authorities here refers to the supervisors, the establishment of the SSM might bring about important changes, since the ECB would then become the “compe-

4 In the words of Hannoun, *op. cit.*, “The main criticism which can be leveled at the European directives is that, instead of confining the zero risk weight to the standardised approach, they permit a generalised zero risk weight through the so-called ‘IRB permanent partial use’ rules. According to these rules, a bank can apply the IRB approach to corporate, mortgage or retail exposures, while applying a one-size-fits all zero risk weight to the sovereign debt of EU member states. This is equivalent to a mutual and unqualified exemption of certain sovereign risks from capital charges; an exemption inconsistent with Basel II’s risk-sensitive framework.”

5 “The 2011 European stress test report that only 36 out of the 90 participating banks applied their own internal model to sovereign risk, a lower fraction than for the corporate, mortgage or retail asset classes.” See Hannoun, *op. cit.*

tent authority” for most large banks, most of which use the IRB approach. This means that it would be up to the ECB to stop the use of this permanent partial exemption, which in turn would encourage banks to diminish their overall sovereign exposure. For example, the Basel Committee on Banking Supervision writes that “the possibility for IRB banks to permanently use the standardised approach for certain exposures was never meant to be used for internationally active banks, and supervisors were (and will continue to be) expected not to approve it for those banks.”⁶

Liquidity requirements

Another reason banks hold large amounts of government debt on their balance sheets is that they have to hold a certain amount of liquid assets. Until recently only government bonds were recognised as liquid.⁷ However, experience over the last years has shown that at times even government bonds can become illiquid. Forcing banks to hold large amounts of government bonds might thus be counterproductive in the case of macroeconomic crises, because the banks might experience liquidity problems at the same time their own sovereign is dealing with financial difficulties. This concern seems to have been at least partially addressed, because the latest version of the so-called liquidity cover ratio (LCR) allows banks to hold other assets to satisfy the LCR’s requirement that they be able to offset potential outflows of funds by selling liquid assets.

Liquidity should be measured by market turnover, bid-ask spreads and similar objective variables, rather than formal criteria. The past few years have shown that in times of acute stress, government bonds of some countries have become illiquid, whereas there has never been any problem with illiquid stock markets.

The key: exposure limits

The reason why a fall in the price of the sovereign bonds of a country generally has such a strong effect on that country’s banks is that banks’ government bond holdings are often highly concentrated on the home sovereign. This concentration is contrary to the general principle of risk diversification.⁸ The need to diversify risk is the reason why all regulated investors (banks, insurance companies,

6 Basel Committee on Banking Supervision: Report to G20 Leaders on Basel III implementation, Bank for International Settlements.

7 For a summary description of the liquidity cover ratio, see: <http://www.bis.org/press/p130106a.pdf>.

8 A related risk that remains difficult to assess is that of correlation across groups of countries. During the euro crisis, the risk premia on the peripheral countries were highly correlated, but the yields (and thus prices) of the group of peripheral countries were at times negatively correlated with those of the core (especially Germany).

investment funds, pension funds) have to limit their exposure to any single counterparty to a fraction of their total investment or capital (for banks). For banks, the limit on the exposure to any one borrower is 25% of their capital, but this limit does not apply to sovereign debt. The logic of this exemption was simple: since there was thought to be no risk in sovereign debt, there was no reason to put any limits on concentration.⁹ The result of this lack of exposure limits has been that banks in the periphery have too much of their own government's debts on their balance sheets, which has greatly contributed to the deadly feedback loop between sovereigns and banks.

Table 1 shows the degree of “domestic leverage” of the systemically important banks in major euro area countries which were subject to the EBA stress tests. It is apparent that in most countries the domestic banking system would not survive a Greek-style haircut on public debt. In the context of the Private Sector Involvement operation of March 2012, holders of Greek bonds had to accept a nominal haircut of over 50%, and on a mark-to-market basis the haircut was over 80%. It is apparent that no bank with a sovereign exposure worth over 100% of its capital would survive such a loss. Unfortunately, this type of data is not available for the entire banking system, but since smaller banks will have a greater domestic bias than large ones, one must assume that the overall exposure of the Spanish and Italian banking systems to their sovereign is higher than the level reported in Table 1, which refers only to the sample of large banks subject to EBA stress tests.¹⁰

In order to stabilise the euro area's financial system and make it resilient to sovereign insolvency, banks need to be induced to diversify their holdings of government debt. Moreover, the direct sale of public debt to households ought to be fostered, instead of via leveraged intermediaries like banks.

Introducing exposure limits now (during a crisis period) would of course be pro-cyclical, as it would force Italian and Spanish banks to sell large amounts of (mostly short-term) government debt. But this can be avoided by grandfathering the existing stocks. The new rules on exposure limits could be applied only in the future and only to new investments. In this way there would be no pressure on the banks in the periphery to sell any of their holdings.

⁹ See Article 113 of the Capital Adequacy Directive.

¹⁰ It is surprisingly difficult to find reliable data on sovereign exposure. This is partially due to the fact that in some countries banks lend directly to regional and local governments (e.g. Germany), but also due to the many “risk mitigation” measures banks can take. For example, many banks have bought CDS protection to lower their risk. The EBA stress test data does reflect risk mitigation measures and thus gives a better picture of the residual risk on banks' balance sheets.

Table 1

Domestic sovereign debt leverage (exposure/capital)
in %

	2010Q4	2011Q4	2012Q2
Germany	264	241	235
Spain	172	131	137
France	73	53	61
Italy	205	155	176
Poland	156	141	115
Portugal	117	102	100
United Kingdom	50	52	50

Source: CEPS database.

The concrete proposal, which would be easy to implement, would be to simply eliminate the exemption for sovereign debt under the Large Exposure Directive. Banks would then be prohibited from holding more than 25% of their capital in the government bonds of any single sovereign. But this new rule would be applied only to flows during a transition period.

Policy implications

A large proportion of government debt is held by banks. This is not an ideal situation given that banks are highly leveraged and that sovereign debt is inherently subject to default risk within the euro area. For financial stability reasons, it would thus be preferable if a higher proportion of government debt were held by unleveraged investors, e.g. directly by households or via investment funds. Within the euro area, banks have actually about as many government bonds on their books as they have emitted bonds themselves. It is difficult to see why the public should invest in bank bonds (whose proceeds banks then invest in government bonds) rather than directly in government bonds. The transactions costs for households buying government bonds directly could certainly be further reduced given that most government debt exists only in electronic form.

However, it is unlikely that the financing patterns for government debt will change any time soon. The problem of how best to limit the dangers to financial stability in an environment in which banks continue to hold large amounts of government debt can thus not be avoided. In reality the key problem is the excessive home bias of banks. This needs to be changed. Banks should be forced to diversify their investment in government debt by a simple application of the large exposure rules which apply to all other bank business.