

Strong Governments, Weak Banks

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Key points

Banks in the northern eurozone have capital ratios that are, on average, less than half of the capital ratios of banks in the eurozone's periphery. We explain this by the fact that northern eurozone banks profit from the financial solidity of their governments and follow business strategies aimed at issuing too much subsidised debt. In doing so, they weaken their balance sheets and become more fragile – less able to withstand future shocks. Paradoxically, financially strong governments breed fragile banks. The opposite occurs in countries with financially weak governments. In these countries banks are forced to strengthen themselves because they are unable to rely on their governments. As a result they have significantly more capital and reserves than banks in the northern eurozone.

Recommendations

More than in the south, the governments of northern Europe should stand up and force the banks to issue more equity. This should go much further than what is foreseen in the Basel III accord. If the experience of the southern eurozone countries is any guide, banks in the north of the eurozone should at least double the capital and the reserves as a percentage of their balance sheets. Failure to do so risks destroying the financial solidity of the northern European governments when, in the future, negative shocks force these governments to come to the rescue of their undercapitalised banks.

The new responsibilities entrusted to the European Central Bank as the single supervisor in the eurozone create a unique opportunity for that institution to change the regulatory and supervisory culture in the eurozone – one that has allowed large banks to continue living dangerously, with insufficient capital.

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One of the more troublesome features of banks is that they still hold so little equity. In 2013 the capital and reserves of EU banks amounted to only 7.6% of total balance sheets. Well-run businesses outside the banking sector typically hold equity shares of 20%, 30% or more of their balances sheets. For good reasons; these well-run firms know that shocks can occur that could wipe out large parts of their balance sheets. Good business strategy thus leads these firms to hold sufficiently large buffers to avoid bankruptcy.

These principles of good behaviour do not seem to apply to banks, however. Admati and Hellwig (2013) have identified the main cause of the low equity shares in banks' balance sheets. This is the 'too big to fail' syndrome. Large banks profit from an implicit guarantee from their governments that will not allow these institutions to fail. As a result of this guarantee, banks can issue debt at very favourable terms. This in turn gives them an incentive to issue cheap debt and to avoid issuing equity that does not profit from government guarantees. Thus, the fundamental reason why large banks issue too much debt and too little equity is that they profit from the subsidy implicit in government guarantees.

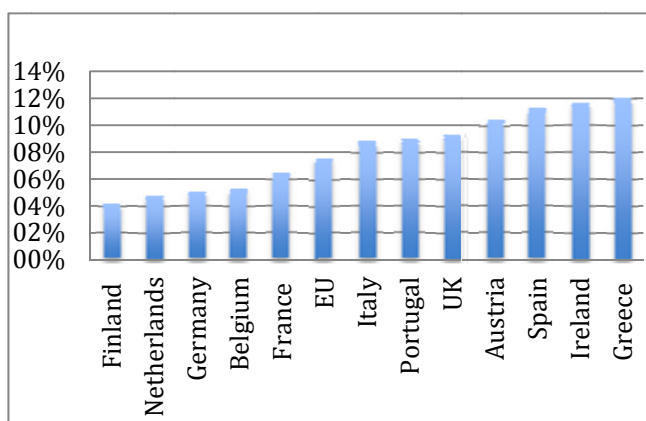
The value of this implicit subsidy clearly depends on the financial strength of the government. A guarantee given by the Greek government to Greek banks is worth less than a guarantee given by the German government to German banks. As a result, the implicit subsidy enjoyed by Greek banks is likely to be much lower than the implicit subsidy enjoyed by German banks. One should expect, therefore, that Greek banks issue less debt and more equity than German banks.

This theoretical prediction can be tested using data of equity shares of banks in the EU*. We present these in Figure 1. The figure shows capital plus reserves as a percentage of the total balance sheets of banks in the major eurozone countries (+ the UK) at the end of 2012. It is

* Note that the equity ratios used here and in the rest of this paper are not risk-adjusted. They can therefore be interpreted as the inverse of the leverage ratios.

striking to find that the northern European countries' banks have very low equity shares; typically 5% or less. By contrast, the banks in the countries of the periphery (Spain, Ireland, Greece) have equity shares exceeding 10%. The banks in the northern eurozone countries are backed up by financially strong governments; the banks in the latter countries have to rely on guarantees from financially weak governments. In effect, it appears that banks located in countries with financially solid governments use the strong guarantees provided by their governments to issue a lot of debt at the expense of equity. Just the opposite occurs in countries with financially weak governments.

Figure 1. Capital+reserves (% balance sheets) (2012)



Note: The data presented here relate to the Monetary Financial Institutions (MFIs) as defined by the ECB. The vast majority of euro area MFIs are credit institutions (i.e. commercial banks, savings banks, post office banks, credit unions, etc.), which accounted for 82.4% of such institutions (6,210 units) on 1 January 2012, while money market funds represented 16.9% (1,275 units).

Capital + reserves includes equity capital, non-distributed benefits or funds, and specific and general provisions against loans, securities and other types of assets.

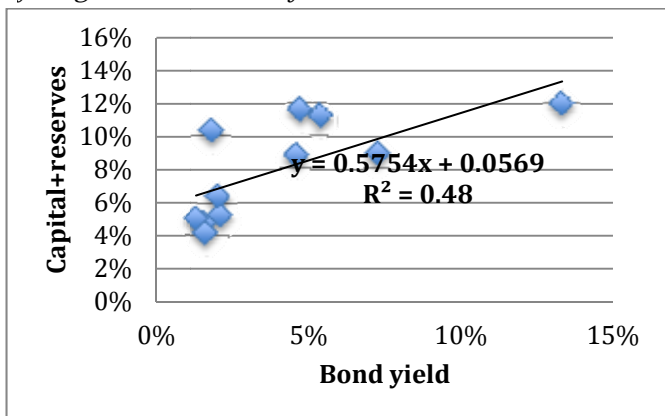
Source: European Central Bank, Statistical Data Warehouse (<http://sdw.ecb.europa.eu/browse.do?node=2018811>).

In order to test this hypothesis further we used the level of the ten-year government bond yields as a measure of the financial strength of governments. The lower the government bond yield, the stronger the financial position of the government, and vice versa.

We now plot the shares of capital + reserves on the vertical axis and the ten-year bond yield (our measure of financial strength of the government) on the horizontal axis in Figure 2.

We find a significant positive relation. Banks in countries with low government bond yields (high financial strength) have low levels of equity; banks in countries with high bond yields (low financial strength) have high levels of equity. We explain about 50% of the total variation of the equity ratios by the government bond yields.

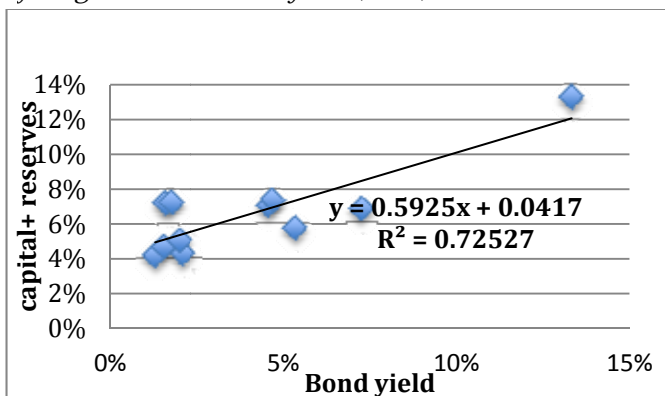
Figure 2. Capital +reserves (% balance sheet) and 10-year government bond yield, 2012



Source: European Central Bank, Statistical Data Warehouse (<http://sdw.ecb.europa.eu/browse.do?node=2018811>).

We have also experimented with another data set of the ECB, which is the “Consolidated Banking Data” set. In contrast to the previous data set, this one only relates to banks on a consolidated basis. The results are shown in Figure 3. We obtain a similar result. In fact, the explanatory power of the government bond yield is even stronger.

Figure 3. Capital+ reserves (%balance sheet) and 10-year government bond yield (2012)

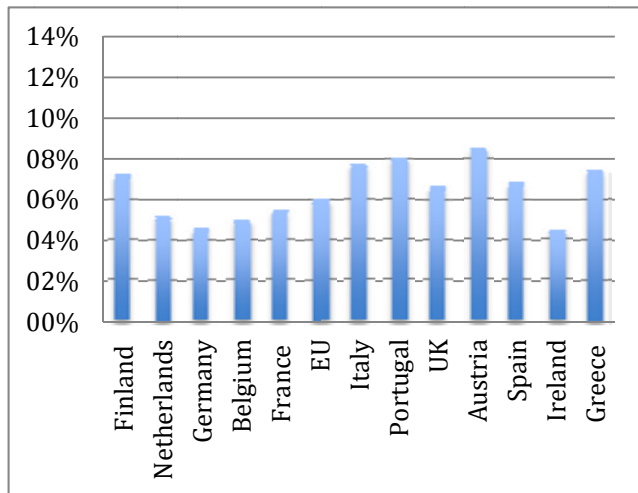


Note: Data refer to banks (not MFIs) and consolidates them. Source: European Central Bank, Consolidated Banking Data (<http://www.ecb.europa.eu/stats/money/consolidated/html/index.en.html>).

It should be noted that in countries where the government bond rates are high banks will typically have to pay high interest rates on the debt they issue. These high interest rates then reflect the risk premium investors want to have, given that the low value of the government guarantee creates a credit risk. These high interest rates in turn give banks incentives to issue less debt and more equity.

It is interesting to compare the previous results with those obtained before the sovereign debt crisis. This was a period where the solidity of the various eurozone governments was perceived to be similar, as can be judged from the fact that before the crisis investors were willing to accumulate Greek and German government bonds at similar interest rates. The implicit guarantees the Greek and German government were giving to their domestic banks were thus perceived to be of similar value. Under those conditions one would expect that the banks in the south and in the north of the eurozone were issuing pretty much the same amount of equity. This is indeed what happened, as shown in Figure 4. Prior to the sovereign debt crisis the banks in the south and in the north of the eurozone had equity ratios (as a percentage of assets) that were not significantly different. We find that in 2007 southern banks on average had an equity ratio of 6.9% versus 5.5% for the northern banks. In 2012 southern banks had increased their equity ratios (on average) to 10.5% while northern banks - shielded by their robust governments - actually reduced theirs to 5.1%; less than half the equity ratios observed in the south.

Figure 4. Capital + reserves (%balance sheets) (2007)



Source: European Central Bank, Statistical Data Warehouse (<http://sdw.ecb.europa.eu/browse.do?node=2018811>).

In Box 1, we analyse the relationship between the equity ratios and the government bond yields econometrically. It confirms our previous analysis (readers who are less interested in econometric issues may wish to skip it).

The previous analysis allows us to uncover a paradox. northern European banks today profit from the financial solidity of their governments and follow business strategies aimed at issuing too much subsidised debt. In doing so, they weaken their balance sheets and become more fragile - less able to withstand future shocks. The paradox is that financially strong governments breed fragile banks. The opposite occurs in countries with financially weak governments. In these countries banks are forced to strengthen themselves, unable to rely on their governments. The result is that they have significantly more capital and reserves (more than twice the amount in some northern countries) and have become less fragile. The financial fragility of governments breeds financially stronger banks.

This is not to deny that banks in southern eurozone countries do not have problems of their own (see Ayadi, et al. (2012), Gros (2013), European Central Bank (2013)). In general, the size of non-performing loans is high in these banks and higher than in northern countries' banks. This may also be a reason why these banks have been forced to hold higher capital ratios.

The paradox that financially strong governments breed fragile banks is not easy to solve. In northern European countries the large but financially fragile banks hold their governments hostage. As a result, despite their strong financial resources, the governments in these countries are politically weak, unable to resist the pressure of the banks to keep equity low.

Yet this is what must change. More than in the south, the governments of the northern European countries should stand up and force the banks to issue more equity. This should go much further than what is foreseen in the Basel III accord. If the experience of the southern eurozone countries is any guide, banks in the north of the eurozone should at least double the capital and the reserves as a percentage of their balance sheets. Failure to do so risks destroying the financial solidity of the northern European governments when, in the future, negative shocks force these governments to come to the rescue of their undercapitalised banks.

The new responsibilities entrusted to the European Central Bank as the single supervisor in the eurozone creates a window of opportunity for that institution to change the regulatory and supervisory culture in the eurozone that has allowed the large banks to continue to live dangerously with insufficient capital.

Box 1. An econometric analysis of capital ratios in the EU

In this box we test the hypothesis that government bond yields (as measures of the financial strength of governments) affect the equity ratios of banks. In order to do so, we use a simple fixed effects econometric model relating the capital ratio and government bond yields. In addition, we control for the business cycle as the equity ratio may be influenced by the growth rate of the economy. We specify the model as follows:

$$r_{it} = \alpha_i + \beta * yield_{it} + \gamma * growth_{it} + \varepsilon_{it}$$

where r_{it} is the capital (including reserves) to assets ratio of the financial institutions in country i at period t ; $yield_{it}$ is the 10-year government bond interest rate of country i at period t ; $growth_{it}$ is the real growth rate of country i at period t ; α_i is the time-invariant fixed effect of country i ; It reflects unobserved country specific variables such as government regulations, sector norms and institutional features that influence the capital ratio. ε_{it} is the error term.

Table 1. Regressions of capital ratio (%) in eurozone countries

Dependent Variable: Capital Ratio		
	(1)	(2)
10-year government bond yield (%)	0.17*** (0.05)	0.17*** (0.05)
Real growth rate (%)	-0.04* (0.02)	-0.02 (0.04)
Crisis	---	0.27 (0.61)
Controlled for fixed effects	Yes	Yes
Observations	154	154
R Square	0.653	0.656

Cluster at country level and robust standard error is shown in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

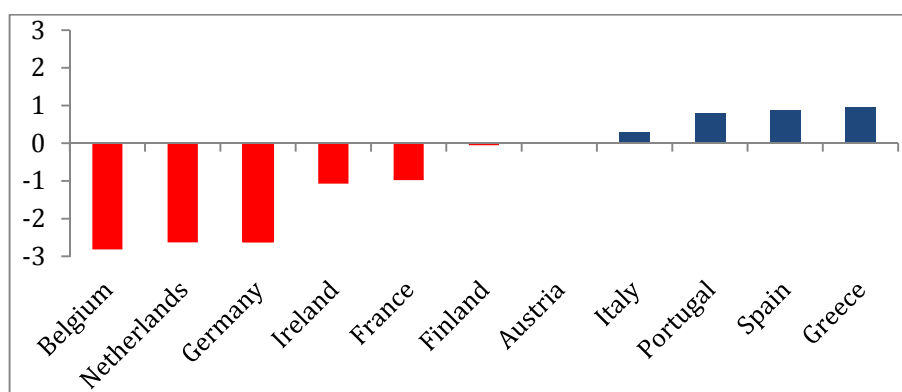
Data Source: European Central Bank, Statistical Data Warehouse.

Table 1 reports the results of the regressions of capital ratio using a sample of 12 eurozone countries over the period 1999-2012. (We have also experimented with regressions in which we control for different features of the banking systems, such as the degree of concentration, size, external position, etc. The effect of the long-term interest rate remains robust. The interested reader can obtain these results on request).

In column (1), we find there is a significant positive relationship between the capital ratio and the government bond yield. We also find that the real growth rate is negatively associated with the capital ratio. The coefficient is only marginally significant. The negative sign suggests that equity ratios change procyclically, i.e. during booms when the risk of the banks' assets declines, the Basel regulatory framework gives incentives to banks to issue less equity. During recessions, the opposite occurs, i.e. the increasing risk of banks' lending portfolio forces them to have more equity. See Brunnermeier, et al. (2009).

Column (2) shows a regression where we have added a crisis dummy. The addition of a 'crisis dummy', does not affect the relationship between the capital ratio and the government bond yield.

Finally, we also plot the fixed effects of each eurozone country in the following figure. We observe that in a number of northern eurozone countries, there seem to be national idiosyncratic and time-invariant features (e.g. specific regulatory and supervisory features) that lead banks to have low equity ratios.

Fixed effects of eurozone countries (constant influence on capital ratio, %)

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