

Press release

What will Eurobonds cost?

Position of the Ifo Institute of 17 August 2011

Given the current debate over the introduction of eurobonds, the Ifo Institute has updated its estimate of the costs for the German government. The calculation is based on the assumption that eurobonds will lead in the long run to the communitarisation of the sovereign debts of all countries in the euro area, guaranteed according to the ECB's capital shares of the individual countries.

The nominal interest rate differences between government bonds, as have been determined by the markets, reflect the different default probabilities of the countries and cause the effective interest rates of the countries (in terms of mathematical expectation values of the interest rates) to be similar. Eurobonds give all states the ability to finance themselves regardless of their default probability at the same nominal interest rate. In so doing they push the effective interest rates of countries, to the extent of the annual default probabilities, under the common nominal interest rate, implying a subsidy of the financing costs of the unsound countries.

The nominal interest rate convergence (and effective interest rate divergence) that is a part of the eurobonds has the effect its proponents desire that the interest rates of unsound countries falls significantly. Since the creditworthiness of the euro countries is communitarised, the creditworthiness of the eurobonds also reflects only the average credit quality of the participating countries. The interest rate of the eurobonds will thus likely settle in the vicinity of the value that would otherwise have resulted in the average of all countries. The effective interest rates of the unsound countries will in some cases even be negative.

At the end of July, the nominal interest rate on ten-year government bonds in the euro area averaged 4.6%, according to the European Central Bank, while for Germany it was only 2.6%. Italy had to pay interest of 5.9%, Spain 6.1%. Portuguese and Irish government bonds were traded with a yield of around 11%, and Greek bonds were traded at almost 15%.

The nominal interest rate differences moved in the same order of magnitude as in 1995, one year before the start of nominal interest rate convergence that went along with the announcement of final fixed exchange rates in the euro area. At that time, nominal interest rates on ten-year government bonds in Italy, Portugal and Spain were, on average, as much as 5 percentage points higher than German interest rates, whereas at the end of July 2011, they were only 3.7 percentage points higher. Even France had to cope with a slightly larger interest rate spread of 0.69 points than at the end of July 2011, when it amounted to 0.65 points. However, Greece's interest rate premium at the time was 10.1 percentage points, which is slightly below the 12.4-point level reported in July this year.

For Germany, a pooling of liability by means of an artificially induced nominal interest rate convergence (and effective interest rate divergence) would in the long term result in substantial additional costs. These additional costs can be calculated for the period after the expiration of all

conventional German government bonds under the assumption that the nominal interest rates of the eurobonds would position themselves at the average interest rates in a regime without such bonds and that interest rate spreads without the eurobonds would remain where they have been as of late.

At the end of July, the yield of 10-year German government bonds was 2.0 percentage points below the euro area average. For 5-year bonds the yield spread was 2.6 percentage points; for two-year bonds it was 3.0 percentage points. The average yield spread therefore depends on the term structure of German government debt. Assuming an average maturity of 7.5 years, this results in a yield spread of 2.3 percentage points. Based on the overall current level of gross debt of the Federal Republic of Germany of €2080 billion (as of the end of 2010), additional interest expenses of €47 billion per year would result.

The calculation is lower if instead of the interest at the end of July the average values of the first seven months of 2011 are used as the basis for comparison. Average German interest rates in this period were not 2.3 percentage points lower, as at the end of July, but 1.6 percentage points below the euro area average. Consequently, using this as a basis, additional interest expenses of €33 billion per year result.

The calculation shows that the expected additional annual expenses depend on a number of assumptions. The additional costs would be lower if debt in the euro countries is reduced, that is, if austerity programmes are implemented in the euro area that go beyond the requirements of the German statutory debt-reduction requirement. This, however, is extremely unlikely. On the contrary, it is to be feared that eurobonds will reduce the incentive for consolidation in the euro area since the disciplining effect of interest rate spreads would be eliminated. Whatever country is more indebted than the average drives up the interest rates for eurobonds slightly, but this disadvantage mostly affects the other eurozone countries and not the country itself. The smaller the country, the smaller is the share of the negative consequences of additional debt that affect this country and the stronger the incentive to carelessly take on additional debt. And the debt incentive as such exists for all countries, including the larger ones. The debt of the euro area is thus likely to grow even faster than in the past, which will increase the interest rates for Eurobonds that the capital markets will require. It is above all to be feared that investors will doubt that the more solid countries will actually be able to shoulder the risks that come along with the liability union. After all, even Germany with a debt ratio of 83% is far above the limit of 60% permitted by the Maastricht Treaty. This would result in a loss of confidence and renewed turmoil in the financial markets, which would then also affect Germany directly.

Some may be inclined to counter the negative incentive effects by limiting the eurobonds to a certain proportion of GDP, for example 50% or 60%; debt that goes beyond this would be the responsibility of the respective countries. But this proposal sounds better than it is. What would happen under this system is that the debtor countries would first refinance their debt with eurobonds alone until the debt limit is reached. For the first few years the debt limit would thus only be on paper and would have no real meaning. And when in time more and more countries come close to the debt limit and fear having to pay higher interest rates for new debt, they will exert political pressure to set a higher debt limit. Past experience with political debt limits in the euro area unfortunately leave little doubt as to what will happen.

Some proponents of eurobonds argue that they would have a high recognition value and for the investors of the world would thus suggest greater liquidity than the individual government bonds in the euro area. This feeds hopes that they can be placed at lower interest rates than the current average of euro interest rates. The liquidity effect is conceivable but likely to be of lesser importance. Surely it will not match the importance of the credit rating effect on which the above calculations are based. The liquidity of the eurobonds will likely not come close to that of German government bonds, and even if it did, their creditworthiness would not even remotely match that of current German government bonds since the liability is offered by countries whose ability to pay is increasingly being doubted by the

markets. Thus Germany will certainly have to pay much higher interest rates as would be the case if it did not join the liability union.

One might conclude from this that in contrast to the above calculation the eurobonds would have to carry the joint and several liability of all participating countries. In fact, there is a fictitious scenario in which lower interest rates than the average for the euro countries would come about because the eurobonds would be serviced completely even if only one single euro country survived and assumed the debts of everyone else. But this scenario is completely unrealistic because even Germany as the largest country with the best rating so far would be driven to default in such a case. After all, the GIPS countries alone and together with Italy have more debt than Germany by half, and Germany today with a debt ratio of 83% is far beyond the 60% limit of the Maastricht Treaty. Those who maintain that with eurobonds interest savings could be achieved over the present average assume unrealistically that Germany, although jointly and severally liable, is not exposed to a greater default risk than is the case today.

Even in the case of the proportionate liability for the eurobonds on which we based our calculations, the Ifo Institute strongly advises against the introduction of eurobonds. Even if Europe had the strength to form a federal state, it would make no sense to communitarise the liability for government debt that has been taken on. Even in the United States of America, which exists as one country, one state is not liable for the other. The principle of liability is the basic principle of any rational economic activity and one of the cornerstones of a market economy. Whoever abandons this places Europe's future in jeopardy.

Table: Calculation of the additional interest costs for Germany after the introduction of eurobonds.

Average yields for the euro area	Yields in the periods:	
	End of July 2011	January–July 2011
Two-year bonds	4.16	3.17
Five-year bonds	4.37	4.07
Seven-year bonds	4.72	4.39
Ten-year bonds	4.59	4.41
Yields for Germany		
Two-year bonds	1.16	1.56
Five-year bonds	1.72	2.34
Seven-year bonds	2.39	2.75
Ten-year bonds	2.56	3.08
Yield differences between Germany and the euro-area average		
Two-year bonds	3.00	1.62
Five-year bonds	2.64	1.73
Seven-year bonds	2.33	1.64
Ten-year bonds	2.03	1.34
<i>Difference calculated for 7.5-year bonds</i>	2.28	1.59
Additional interest costs for Germany on the basis of the interest difference for 7.5-year bonds		
Sovereign debt 2010 in bn euros	2080	2080
Sovereign debt 2010 as % of GDP	83.2	83.2
Additional interest burden as % of GDP	1.90	1.32
Additional interest burden in relation to GDP in bn euros	47	33

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