

A minimally modified version appeared on LSE Business Review ([link](#)).

Eurobonds (or Coronabonds) Would not Be Costly for Northern Euro Area Countries

Matthias Weber.*

April 16, 2020

Well-designed eurobonds would lower financing costs for many euro area countries while hardly or not increasing the costs for the others. These bonds should have an explicit guarantee from the ECB. The bonds could be used up to a limit of GDP (a low number of 10-25% of GDP would allow to observe market reactions before deciding whether to expand). Their introduction would increase the costs on regular German 10-year bonds by at most 10 to 30 basis points.

There are currently heated debates on eurobonds, partly with the name coronabonds. This topic is also on the agenda again for the next EU and euro area meetings (for economists' take on the topic, see, e.g., Bofinger et al., 2020, or Giavazzi & Tabellini, 2020; eurobonds have also been discussed many times before, e.g., Delpla & von Weizsäcker, 2010). Some countries, which have to pay relatively high interest rates on their government debt, demand the issuance of such bonds, most notably Italy, understandably assuming that such bonds would reduce their financing costs (which would help to fight the outbreak of Covid-19 and to restart the economy thereafter). Countries with low financing costs, such as Austria, Finland, Germany and especially the Netherlands, thus far oppose eurobonds. However, the fears in those countries (fears of having to take over the debt of other countries in the case of a default and fears of increased own borrowing costs when issuing bonds jointly with "weaker" countries) are often informed by false argumentation. In fact, if the eurobonds are designed well, their issuance will hardly cost Northern countries anything.

Design of the Eurobonds/Coronabonds

It is important to clarify a few important design features that such bonds should have. First, there should be a limit on the amount of debt that a country can make via these eurobonds. This makes sure that the effect on other euro area countries would be limited if a country defaulted on its eurobond debt (in fact, the risk that a default happens can be excluded almost entirely, as described below). If the bonds are now issued as coronabonds, meaning that their main aim is to help countries deal with this crisis, a possible limit could be between 10 and 25 percent of GDP. With such a relatively low limit, the coronabonds would be a good trial balloon – if the bonds are then deemed to be a success by all, regular eurobonds could be issued, for instance up to 60 percent of GDP for each country.

* School of Finance, University of St. Gallen. Email: matthias.weber@unisg.ch. I would like to thank Martin Brown, Olimpia Carradori, Domenico Massaro, and Johannes Vatter for comments and suggestions.

Second, there should be sanctions when countries default on this debt. Such sanctions could, for example, be that a country defaulting on the eurobond debt loses its voting rights in the EU (a more drastic sanction would be that a default automatically triggers article 51 without the right to revoke it – a defaulting country would then be forced to leave the EU, but such severe sanctions may seem unnecessarily harsh and may not even be credible). With serious sanctions and a limit to the debt via eurobonds, no government would default on this debt – assuming that the bonds are there permanently, countries could easily roll this debt over with new eurobonds (countries may still default on their regular government debt, but that would not be a problem for the eurobonds).

Third, the debt should be guaranteed by the ECB (the bonds could be directly redeemed by the ECB at maturity and the ECB could then receive the money from the respective country). This makes sure that the bonds have zero default risk for the bondholders, because the ECB cannot run out of money. In the theoretical case that a country defaulted on this debt, the bondholders would not even notice it. The ECB could just "print the money" or roll over the bonds eternally or until the moment that the defaulting country comes back chastened and pays back the debt. This also shows that such a theoretical default would not trouble other governments' finances: they would not have to cover the default. Because of these design features, the eurobonds would be different from loans via the European Stability Mechanism (ESM) – the eurobonds be much less risky for both bondholders and euro area countries (the ESM may still be useful now to help the most troubled countries fast, as setting up eurobonds would take some time). The eurobonds would also be different from the ECB just guaranteeing all government debt by euro area countries in general, because with eurobonds there is a limit up to which the bonds are guaranteed and a clear distinction is made between eurobonds and regular sovereign bonds (if the ECB just guaranteed all government debt, there would be the danger that a country could make excessive debt and then default, so-called moral hazard, something that cannot happen with the proposed design of eurobonds).

The third point means that the ECB would be a lender of last resort in the eurobond market. The role of lender of last resort in the sovereign debt market is an important role that central banks in general have (see De Grauwe, 2013), but which is missing in the current setup of the European Monetary Union. For central banks of countries outside of monetary unions, it implies that sovereign debt issued in the country's own currency has a default risk of close to zero, because the central bank could always serve the debt by printing money; this may in general be inflationary, but for bondholders this situation is much better than an actual default (note that the absence of default risk can only translate into low interest rates if inflation risk is also low, something that is the case in the euro area; also note that good financing conditions are important for all countries but even more for countries in a currency union where fiscal policy is a particularly important stabilization tool, see Bertasiute et al., 2020). It is in general implicitly assumed that national central banks assume the role of lender of last resort in the sovereign debt market – after all, a national central bank is the institution of a country, no matter how independent it may seem. The flaw in the current design of the euro area that countries do not have such a lender of last resort would thus be at least partially eliminated. The implicit function of the central bank being a lender of last resort would be made an explicit function, but with a pre-specified limit up to which the ECB would and could do this.

Costs to Northern Euro Area Countries

In addition to the fear of an actual default (which is unjustified as explained above), another fear of Northern countries is that their own funding costs would increase in response to having joint bonds with countries with currently higher financing costs. This might be due to some erroneous thinking that the yield on the eurobonds would be some kind of weighted average of countries' current bond yields. Such thinking is wrong: the yields of eurobonds would be determined by the demand for euro-denominated bonds without default risk (to be precise, by demand and supply, but the supply would be limited at a certain level of GDP, so that the determination of the price would de facto be determined by the demand for the bonds alone).

It is not possible to state exactly how costly or beneficial the introduction of eurobonds would be for Northern countries, but it is possible to get a good idea. I will focus on Germany here, as the country with the lowest financing costs and as the largest EU country, but the same argument can be applied to other countries, including Austria, Finland, and the Netherlands. While one cannot observe a demand curve for safe euro-denominated bonds, it is possible to observe a lower bound for such a demand curve. This lower bound can be obtained by looking at the cumulative government debt of eurozone countries and their bond yields, as shown in Figure 1. Standard demand curves have prices on the vertical and quantities on the horizontal axis. When considering bonds, it is often more convenient to consider yields (interest rates) rather than bond prices (of course, these are just mirror images of one another). The figure shows long-term bond yields on the vertical axis, with an inverted

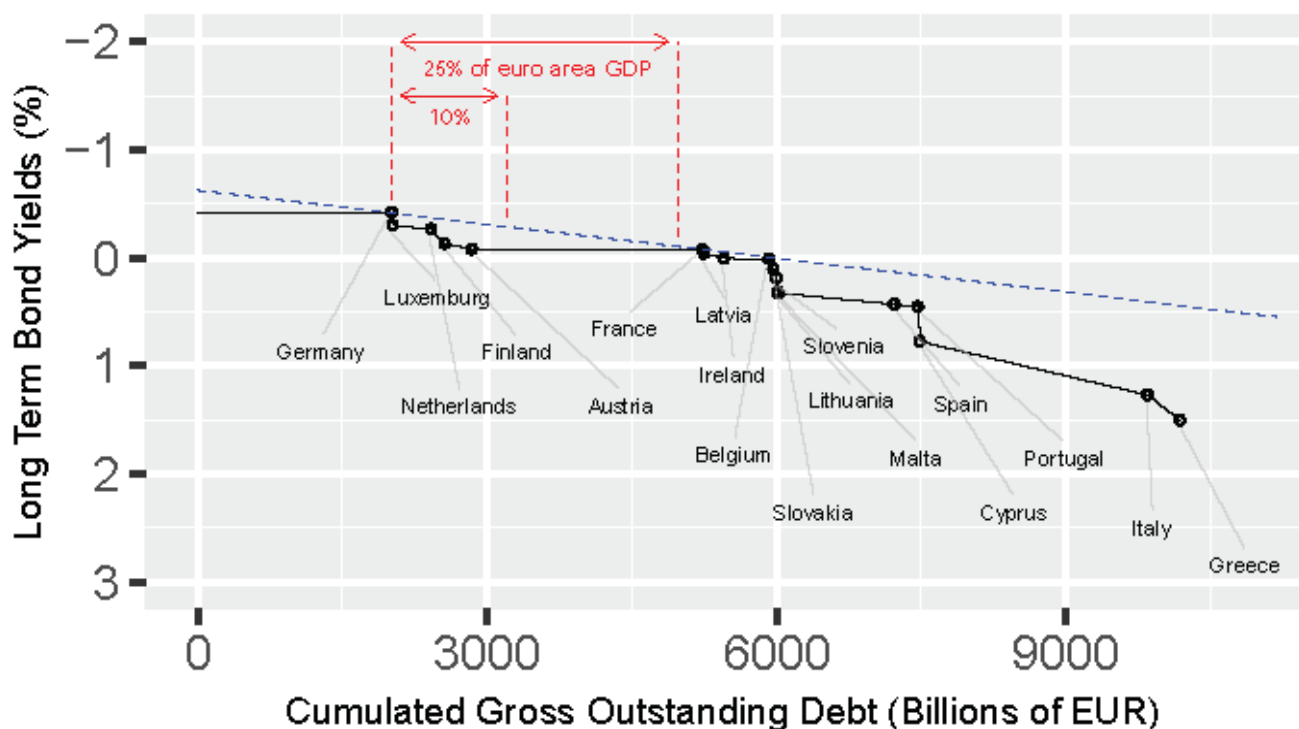


Figure 1: Cumulative euro area debt and bond yields

Notes: Bonds have a residual maturity of 10 years (average March 2 to April 2, 2020; ThomsonReuters). Using 10-year bonds is reasonable as the average term to maturity of outstanding government debt is not much lower (ca. 8 years for OECD countries; OECD, 2020) and the data are easily available. Data on Cumulative debt and GDP are current estimates of nominal values for 2019 (ThomsonReuters). Estonia is excluded as its yields are not available.

scale: high yields, which correspond to low bond prices, are shown at the bottom, low yields, which correspond to high bond prices, at the top. On the horizontal axis is the cumulative debt by euro area countries. The dots in the graph correspond to euro area countries' bond yields and government debt issued in the euro area at the *same or lower* yields. Thus, the dot for the Netherlands shows the bond yield on Dutch long-term government bonds on the vertical axis and eurozone government debt that is considered to be equally safe or safer on the horizontal axis (in this case the debt of Germany, Luxembourg, and the Netherlands combined). This can be used to construct a lower bound of the demand curve of safe bonds. We observe the bond yield of German bonds; this yield must thus lie on the demand curve for German bonds. We do not observe German bond yields at a higher quantity, but we observe the yields of other bonds that are considered less safe. Taking the bonds with the second-lowest yield, Luxembourgish bonds, we can infer that the yield of German bonds, if all Luxembourgish bonds were replaced by German bonds would be at most what the yield of Luxembourgish bonds is now. What the black line, connecting all the dots, thus shows is a lower bound of the demand curve for bonds with the risk of German government bonds, which is naturally also a lower bound for bonds with even lower risk, such as the proposed eurobonds.

It seems reasonable to assume that the kinks that can be observed in the black line connecting the dots are not present in the demand curve for safe assets (rather, these kinks seem to reflect changes in risk levels). To work with a linear function, the blue dashed line is the steepest possible straight line that crosses the observation for Germany and that is nowhere below the observation for another country. This line can be considered a lower bound of the demand curve for eurobonds (in the picture, the line touches the observation for France, which faces higher interest rates than Germany – if the interest rate is higher because French government bonds are riskier, the actual demand line for the safe assets would lie above the blue dashed line). If one entered eurobonds in this graph, they would be the safest and thus the leftmost assets, the other bonds would accordingly shift to the right. The blue dashed line could then be used to calculate changes in bond yields in response to the introduction of eurobonds in this "worst-case" scenario.

Assuming that each country can make debt via eurobonds up to 25% of GDP, German 10-year interest rates would rise from about -0.4 to about -0.1 and only to about -0.3 if the debt limit is at 10% of GDP. These interest rates can be found in the graph where the two right vertical red dashed lines intersect with the blue dashed line (the yield for German bonds would lie on the blue dashed line, above the value on the horizontal axis corresponding to the total amount of outstanding eurobonds and German bonds).

Increases in interest rates from -.4 to -.3 (eurobonds up to 10% of GDP) or to -0.1 (up to 25%) for Germany are exaggerating the problem in terms of financing costs for Germany for a variety of reasons. First, as already discussed, the blue dashed demand curve is a lower bound for such a demand curve as the dots in the graph represent more and more risk, the further one moves to the right. Second, even Germany may in general default on its debt – it is unlikely, but even this debt is not as safe as an ECB guarantee. This is another reason, why the demand for eurobonds should lie above the blue dashed line in the graph. Third, for the calculations it is assumed that Germany makes use of its limit of eurobonds in addition to all current debt – in general, if Germany makes use of the eurobonds, it would have to issue less regular debt, which would lead to a smaller change in interest rates. Fourth, such bonds would be safe assets with high liquidity, which would make these bonds attractive to

central banks, sovereign wealth funds, and pension funds worldwide. In the markets, there is a premium for highly liquid assets (one can argue that the reason why German bonds have lower yields than Austrian, Dutch, Finnish, or Luxembourgish bonds is exactly that they are more liquid, because Germany is larger). Similar to the US, which has been reaping benefits of their reserve-currency status and borrowed at cheaper rates than it otherwise would have (Gourinchas and Rey, 2007), the euro area may then also benefit from such a special status, of course at a smaller scale. In fact, Ilzetzki et al. (2020) argue that the reason why the euro is being used so little internationally and "punching below its weight" is precisely that there are no eurozone-wide safe and liquid assets. Taking these four points together, even a deterioration of financing conditions for Northern euro area countries of 30 basis points in response to coronabonds with a limit of 25% of GDP seems too pessimistic – such bonds would most likely cost these countries nothing at all, the countries might even benefit from them.¹

Concluding Remarks

Discussions about eurobonds often seem to be driven more by emotions than by reason, both in the North of Europe and in the South. In the North, there seem to be excessive fears of defaults by other countries and of increased borrowing costs for themselves. As discussed above, these fears are irrational if the eurobonds are designed well. In the South, in particular in Italy, eurobonds seem to be equated with solidarity in this devastating health crisis. This is equally false, for two reasons. First, this is a bad measure of European solidarity precisely because the discussion in the North is often driven by bad arguments. Taking Germany as example again, there is a strong feeling of solidarity toward the most hard-hit regions in Europe. This has not (yet?) materialized in the government's acceptance of eurobonds, but it materializes in treating French and Italian patients in German hospitals and in sending tons of materials to other EU countries, especially to Italy (including hundreds of medical ventilators). The German government also initiated and supported different measures to alleviate the financial troubles of the most hard-hit countries, such as using the ESM for funding without conditionality, using the European Investment Bank to support enterprises, and founding a European short-term unemployment insurance scheme. However, such support is overshadowed by the discussions about eurobonds (I would still argue that there should be more help, but the PR that the present within-EU support has received is unjustly negative – in contrast to Russia's PR, where a positive image was created with a bit of mainly useless material). Second, while the introduction of eurobonds would be preferable over ESM funding (in particular in the long run – eurobonds, with their advantages, would be there to stay, whereas later refinancing of ESM loans is unclear), the difference for the ability to fight this crisis in the hardest-hit countries in the short run would only be modest (if only few countries made use of ESM loans; also with ESM loans, their rates would be much below their current rates).

¹ This analysis is of course simplistic. The results of more sophisticated models may differ, but it is unlikely that the results differ much if such a version of eurobonds is considered (for a structural model with another version of eurobonds, see Baglioni and Cherubini, 2011). Note also that the current calculations are in times of generally low interest rates – both negative and positive effects of the introduction of eurobonds on government bond yields might be somewhat larger in times of higher interest rates, but these times seem far away at the moment.

To sum up, the Northern countries should give up their rejection of eurobonds. Such bonds are economically a good idea if they are well designed. Coronabonds, where such bonds are issued as soon as possible up to a relatively low limit of 10 to 25% of GDP, would be a good test of market reactions to such bonds. If they are a success, it will easily be possible to allow for eurobonds up to a higher limit, for example 60% of GDP. While the bonds are a good idea, it should be clear that they would only be a small part of the needed response to the current health and economic crisis.

References

- Baglioni, A. S., & Cherubini, U. (2011). A theory of eurobonds. Working Paper, University of Bologna.
- Bertasiute, A., Massaro, D., & Weber, M. (2020). The behavioral economics of currency unions: Economic integration and monetary policy. *Journal of Economic Dynamics and Control*, 112, 103850.
- Bofinger, P., Dullien, S., Felbermayer, G., Hüther, M., Schularick, M., Südekum, J., & Trebsch, C. (2020). To avoid economic disaster, Europe must demonstrate financial solidarity. *New Statesman*, 30 March 2020, [link](#).
- De Grauwe, P. (2013). The European Central Bank as lender of last resort in the government bond markets. *CESifo Economic Studies*, 59(3), 520-535.
- Delpla, J., & von Weizsäcker, J. (2010). The blue bond proposal. *Bruegel Policy Brief*, 2010(3).
- Giavazzi, F., & Tabellini, G. (2020). Covid Perpetual Eurobonds: Jointly guaranteed and supported by the ECB. *VoxEU*, 24 March 2020, [link](#).
- Gourinchas, P. O., & Rey, H. (2007). From world banker to world venture capitalist: US external adjustment and the exorbitant privilege. In *G7 current account imbalances: Sustainability and adjustment* (pp. 11-66). University of Chicago Press.
- Ilzetzki, E., Reinhart, C. M., & Rogoff, K. S. (2020). *Why Is the Euro Punching Below Its Weight?* Working Paper No. 26760, National Bureau of Economic Research.
- OECD (2020). *Sovereign Borrowing Outlook for OECD Countries 2020*.