# How The ECB Can Structure Quantitative Easing Without Fiscal Transfers Paul de Grauwe and Yuemei Ji, Social Europe Journal, 16 Janvier 2015

The ECB has been struggling to implement a programme of quantitative easing (QE) that would successfully target deflation. The main difficulty is political, stemming from opposition from German institutions. Their argument against is that a government bond buying programme by the ECB would mix fiscal and monetary policy. This column argues the opposite – such a programme can be structured so that it does not mix fiscal and monetary policy. It, therefore, would not impose a risk on German taxpayers.

The ECB has been struggling to implement a programme of quantitative easing (QE) to counter the deflationary forces in the Eurozone. What one can say today is that it has not been very successful in stopping deflationary forces as is made vivid in Figure 1. We observe that since 2012 inflation has declined steadily in the Eurozone and became negative at the end of 2014. This trend has coincided with a spectacular decline in the balance sheet of the ECB and a concomitant decline in the money base (the liabilities side of the ECB's balance sheet) since 2012. Figure 2 shows the balance sheets of the Fed and the ECB, and the strong contrasts in the development of the balance sheets of these two central banks. Figure 3 shows the money base in the Eurozone since 2010 and the spectacular decline in the money base since 2012.



Figure 1. Inflation in US and Eurozone





<sup>1</sup> 



Source: ECB.

In order to raise inflation, it will be necessary to increase the money base again. Note, however, that while necessary, this is not sufficient. The central bank liquidity must ultimately lead to an increase in bank credit and the money stock (see Friedman and Schwartz 1960). It is interesting to note that Friedman and Schwartz criticised the failure of the Federal Reserve in the 1930s to prevent the decline in the US money base. They argued that this failure contributed to the Great Depression. According to Friedman and Schwartz, the Fed failed to stop the decline of the money base as a result of a refusal to buy a sufficient amount of government securities.

An increase in the money base can be achieved by quantitative easing. The technically easiest way to implement QE consists in buying government bonds in the secondary markets. The reason why this is technically the easiest way to implement QE is that the market for government bonds is large and very liquid. As a result, it has been the standard approach in most central banks of the world. The Federal Reserve and the Bank of England have not hesitated to buy large amounts of government bonds to counter deflation in their respective countries, and they seem to have been more successful than the ECB.

The ECB, however, has found out that the technically easiest instrument of QE has become politically the most difficult one to use. This has to do with the intense hostility of the German Bundesbank, the German Constitutional Court, and of many German economists against the use of a government bond buying programme.

The most important argument used by the German opponents of a government bond buying programme by the ECB is that such a programme mixes monetary and fiscal policy<sup>1</sup>. The argument goes as follows. When in the context of QE the ECB buys government bonds from fiscally weak countries it takes a credit risk. Some of these countries may default on their debt. This then will lead to losses for the ECB, which, in turn, means that the taxpayers of the fiscally sound member countries of the Eurozone (mainly Germany) will be forced to foot the bill. Thus, when the ECB buys government bonds, it creates a risk that future taxpayers will be liable to bear losses. Put differently, the ECB is, in fact, conducting fiscal policies in that it organises fiscal transfers between member states. The ECB has no mandate to do so.

<sup>&</sup>lt;sup>1</sup> We have analysed the other arguments often used in Germany in De Grauwe and Ji (2013) and found them wanting. See also Winkler (2014) and Gerner-Beuerle, et al. (2014). Also we do not go into legal arguments. A preliminary ruling of the European Court of Justice suggests that a bond-buying program in the context of the ECB's monetary policy is legal.

This argument has been defended in various wordings by the Bundesbank (2012), Weidmann, the President of the Bundesbank, the German Constitutional Court (BvR 2014), and well known German economists (Sinn 2013, Weber 2010, among others). It has now become the generally accepted narrative among many German economists. Yet, it is wrong.

We will argue in this column that a government bond buying programme by the ECB can be structured in such a way that it does not create any risk for the German taxpayer and that, therefore, there is no mixing of monetary and fiscal policies when the ECB buys government bonds.

## The Basics

Let us start with the basics. When a central bank buys government bonds, it substitutes one type of liabilities of the public sector with another one. Government bonds that promise a fixed interest rate are replaced by a monetary liability without interest but carrying an inflation risk. At the moment of the purchase, the government bonds cease to exist. All that is left of the bonds is a monetary liability of the central bank (which is one branch of the public sector).

Of course, typically the central bank keeps the government bonds on its balance sheet, thereby creating the fiction that these bonds still exist. These bonds, however, are just a claim of one branch of the public sector (the central bank) against another branch of the public sector (the government). These two branches should be consolidated into the public sector, and then it turns out that these claims and liabilities cancel out.

Another way to see the same thing is by considering the flows. When the government bonds are kept on the balance sheet of the central bank, the government transfers interest to the central bank. The latter then transfers this interest revenue back to the government. The central bank could easily stop this fiction and put the bonds in the shredding machine. It would make no difference. No taxpayer is involved. The fact that the bonds are destroyed does not produce a new risk for the taxpayers.

Note that the fiscal implications arise at the moment of the purchase of the bonds by the central bank. At the moment these bonds are taken out of circulation, the government does not have to pay interest anymore. (The interest payments to the central bank are just a bookkeeping affair because the government gets them back). Prior to the purchase, the government had to make these interest payments and thus had to tax citizens to make this possible. Therefore, the purchase of the bonds by the central bank relieves taxpayers. The price the taxpayers pay is that there might be more inflation. But when this operation is performed to fight deflation (i.e. to increase inflation) as is the case today, this should, in fact, increase the taxpayers' welfare. What happens afterwards with these bonds on the balance sheet of the central bank is of no importance to the taxpayers.

Put differently, the value at which the bonds are kept on the balance sheet of the central bank has no bearing for the taxpayer.

These bonds could be given a value of zero or any other value without any taxpayer suffering or gaining from this. Does this conclusion also hold in a monetary union like the Eurozone? The answer is yes, provided we structure the bond buying programme carefully. We show this in the next section.

## Government Bond Purchase And Fiscal Transfers In A Monetary Union

Suppose the ECB buys an amount of government bonds of €1,000 bn (this is the amount by which the ECB wants to increase its balance sheet) and distributes the purchases of individual countries' bonds according to the equity shares of the member countries in the Eurozone. We show these equity shares and the corresponding amounts of national bond purchases in Table 1.

These government bonds are held on the balance sheet of the ECB and lead to interest payments of each government to the ECB. These interest payments are profits made by the ECB that will have to be returned to the national central banks, which will return these to the national treasuries. If we use the same equity shares to return the interest payments and if the interest rates on these national bonds are the same, the ECB will return exactly the same amount of interest it has received from the national treasuries back to the same treasuries. (We discuss the case where the interest rates are not the same later).

The purchase has the following fiscal implications in each country. Taxpayers in each country have to pay less tax because the bonds held by the ECB do not lead to interest expenses of the respective governments anymore. The taxpayers have an inflation risk instead. But since the purpose of the purchase is to increase inflation to a higher and more optimal level, the welfare of the taxpayers increases.

The important point to make, however, is that no fiscal transfers between member countries are involved. The German taxpayers gain because part of the German debt is monetised; the Italian taxpayers gain because part of the Italian debt is monetised. This is the effect each of these countries had before they were in the monetary union when their national central banks in the context of their monetary policies were buying national government bonds.

		Bond purchase				
	equity shares					
Nationale Bank van België	3,5	35				
Deutsche Bundesbank	27,1	271				
Central Bank of Ireland	1,6	16				
Bank of Greece	2,8	28				
Banco de España	11,9	119				
Banque de France	20,3	203				
Banca d'Italia	17,9	179				
De Nederlandsche Bank	5,7	57				
Oesterreichische Nationalbank	2,8	28				
Banco de Portugal	2,5	25				
Suomen Pankki – Finlands Bank	1,8	18				
Others	2,3	23				
Total	100,0	1,000,0				

Table 1.	Equity	shares	of member	countries ir	ו ECB	and	distribution	of bond	purchase
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Now suppose that one of the member countries' governments defaults (the big scare of most German economists). To make it more dramatic, suppose it is Italy. In that case, the Italian treasury will cease to pay interest to the ECB. If the ECB then uses the rule (which is easy to enforce) that it will not transfer interest to the Banca d'Italia, the other governments will get back exactly what they have paid to the ECB. German, Dutch, Finnish, etc. taxpayers will not be involved and will not have to pay a penny extra. In fact, the Italian taxpayers will not gain anything either. The Italian treasury does not pay interest to the ECB anymore and does not get anything in return from the ECB<sup>2</sup>. Thus, this particular way of structuring the bond purchase and interest payments leads to the same neutrality result that we discovered in the case of a single country – the value of the bonds held by the central bank has no bearing for the taxpayers. There are no fiscal transfers arising from the fact that the Italian government has defaulted. The German taxpayer does not have to foot the bill.

<sup>&</sup>lt;sup>2</sup> Note that this neutrality effect only holds for the Italian government bonds held by the ECB, not for the Italian bonds held by the public.

We made the assumption that the interest rates on the government bonds held by the ECB are equal. In general, this is not the case. The interest rate on the government bonds of the fiscally prudent governments is usually lower than the interest rate on the bonds of fiscally less prudent governments. Thus, the interest rate on German bonds is lower than on Italian bonds. What are the implications?

It is easy to show that this will lead to a fiscal transfer towards the taxpayers of the fiscally prudent country, Germany in our example. The reason is that the Italian treasury pays more interest to the ECB than the German treasury. Thus, the profits that the ECB makes contain relatively more Italian than German interest revenues. But this profit is redistributed according to the equity shares. Thus, Germany will receive a net positive interest flow made possible by a net negative interest flow from Italy. There is a fiscal transfer, but it is not the one so much feared by the President of the Bundesbank and German economists. The German taxpayer is a net recipient from this QE operation. What happens if in this case Italy were to default? The answer is that the net positive interest flow in favour of the bill' by German taxpayers. An Italian default would only imply that the German taxpayer stops enjoying the fiscal transfer resulting from the bond buying programme by the ECB.

It is possible to completely eliminate this type of fiscal transfer between Italy and Germany, however. This can be achieved by following a somewhat different interest distribution rule. Instead of pooling the interest payments the ECB receives and then distributing them according to the equity shares, one could also use a rule of '*juste retour*'. This would mean that the ECB redistributes the exact amounts of interest payments it has received from each member government back to the same government. If this rule is applied, it can easily be seen that the neutrality result holds perfectly. There would be no net interest transfer from Italy to Germany before or after the default. Complete neutrality is restored and taxpayers are shielded from movements of the value of the bonds on the ECB's balance sheet.

### Permanent vs. Temporary Bond Purchases

The previous discussion developed the case of a permanent purchase of government bonds, i.e. the government bonds are permanently kept on the ECB's balance sheet. It is likely, however, that in the future the ECB will want to sell part of the governments bonds it has acquired today back in the secondary market. At that moment, monetary liabilities of the ECB (and thus the money base) will decline again and government bonds will be put back into circulation. This will have a fiscal implication, i.e. the national governments will have to pay interest to the new holders of these bonds (private investors) that will not be reimbursed anymore, as was the case when the bonds were held by the ECB.

However, if the sales of government bonds occur according to the same equity shares used for the purchase, there will be no fiscal transfers between countries. The German government will be confronted with the need to pay interest on German government bonds as it did before the bonds were bought by the ECB. The same is true for the other governments. Thus, future sales of government bonds can be tailored in such a way that they do not lead to fiscal transfers between member countries. German taxpayers can sleep peacefully – they will not have to foot the bill of other governments.

What happens if before the future sales of government bonds a member country defaults? Let us assume again this is Italy. In this case, the issue arises of whether the ECB will have enough government bonds left over to sell. It can immediately be seen that this is not likely to lead to a problem, at least if the ECB does not want to sell the full amount of the bonds acquired by the QE operation. Since the ECB has shrunk its balance sheet so much since 2012 (see Figure 2), it will want to restore a balance sheet size corresponding to the one existing before the crisis. Extending the trend that existed before 2008 to the present period implies that the ECB is likely to keep at least €500 bn of the €1 trillion acquired through QE on its balance sheet. In that case, only €500 bn would have to be sold. One would need a catastrophic number of countries defaulting before the ECB runs out of bonds to sell.

One can conclude that the need to create additional money base to achieve the inflation target of 2% makes it possible to write down a significant part of the government debt on the ECB's balance sheet without creating fiscal transfers between member states. This is also the conclusion arrived at by Paris and Wyplosz (2014).

#### Conclusion

The ECB has been prevented from doing what is necessary, i.e. to increase the money base so as to maintain its objective of keeping inflation close to 2%. It has been prevented from acting as a result of an intense opposition of major German institutions and of a large segment of the community of German economists. The surprising thing about this opposition is that it has been based on a wrong interpretation of the fiscal implications of QE, i.e. that this will lead to fiscal transfers between member countries. One could have expected that German central bankers and German economics professors understand the nature of monetary policy in a monetary union. One is surprised that this knowledge has been set aside and a myth has been created that has helped to stir an irrational fear in Germany against the use of a monetary policy instrument that in most developed nations is considered to be best practice.

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