

SOBER LOOK

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Shedding light on recent bond volatility in the Eurozone

Guest post by Marcello Minenna

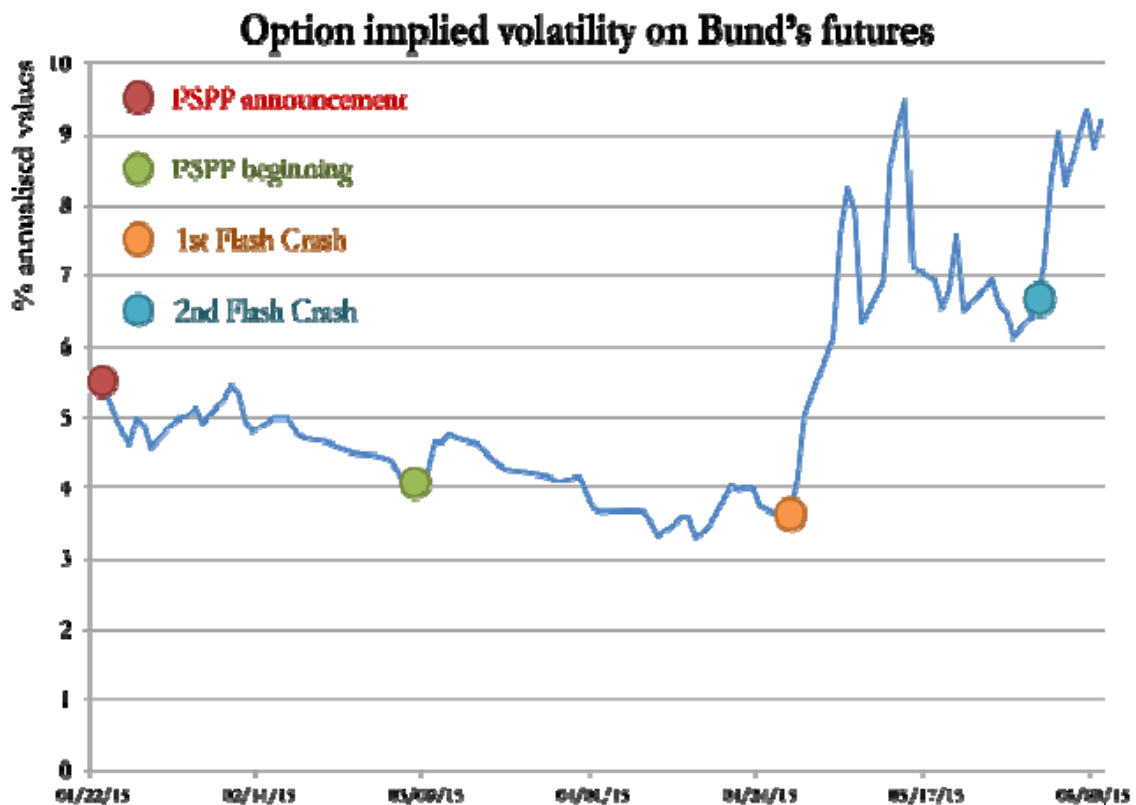
Typically the technical details of open market operations of the central banks are not known. The unpredictability prevents in fact opportunistic behaviors of banks and alterations in market microstructure.

The ECB's Public Sector Purchase Program (PSPP) ignores these principles with the following results:

- bank lending tends to zero;
- the interest rate volatility of the Eurozone Sovereign Bonds (EZ govies) has considerably increased;
- banks have achieved almost 13 billion euros of capital gains in return for their national central banks (NCBs).

The first point is self-explanatory and the evidence can be found in the data published by the ECB in April 2015 (<https://www.ecb.europa.eu/press/pdf/md/md1504.pdf>); QE at least for now is not loosening the credit crunch.

The second point simply comes from an analysis of the options implied volatility on Bund's futures.



With regards to the estimates of the banks' capital gains, some further considerations are required.

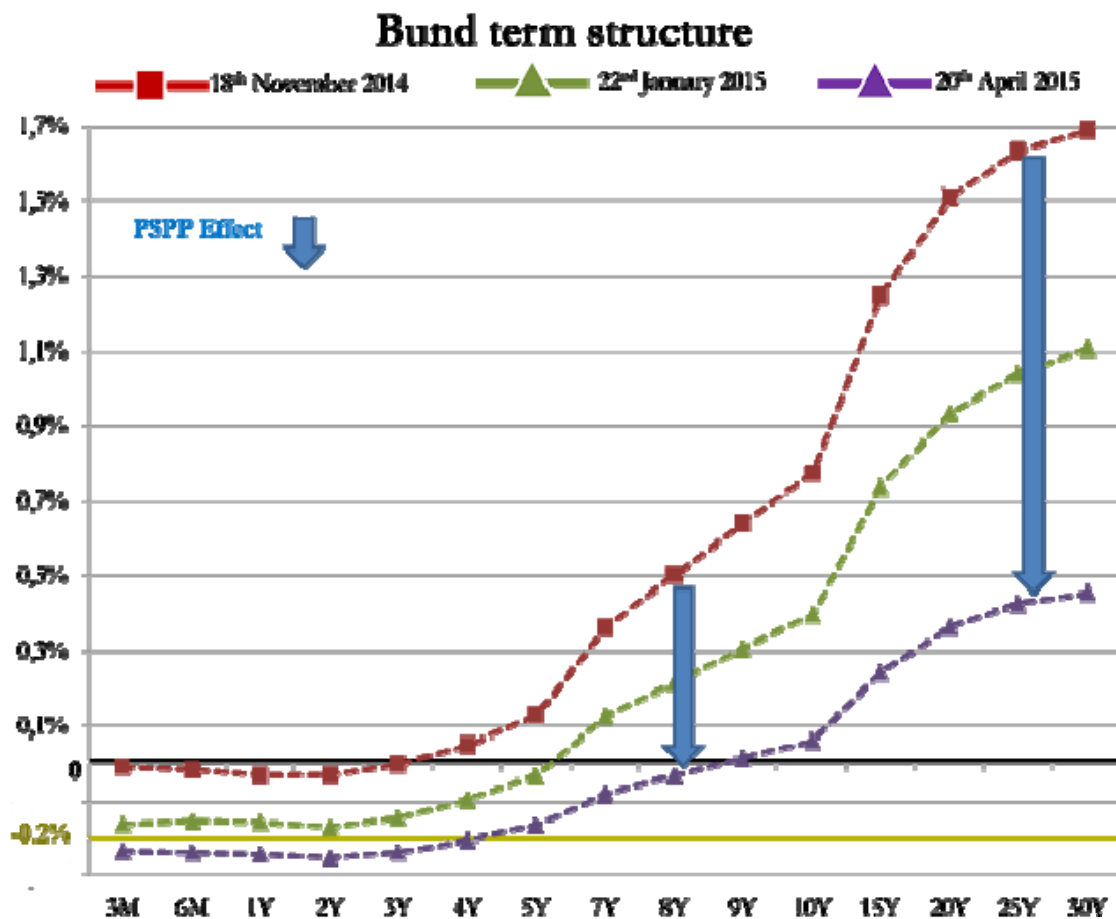
First, the fact that bonds with yields lower than the deposit facility rate are not eligible under the PSPP.

The reason of this floor is to avoid that through the monetary policy there could occur undue fiscal transfers within the system. To explain this let's consider first what happens in a simplified currency area where we have only one Central Bank and one private bank. The private bank sells a bond to the Central Bank, let's say at 100 euros, and this bond has a coupon rate of 5%. Hence, by buying the bond the Central Bank receives a coupon of 5 euros. The private bank pours the money cashed (from selling the bond) on its deposit account at the Central Bank and it gains a yield on the money deposited. In order to avoid that the Central Bank would experience a loss obviously the deposit account should pay at most an interest of 5%. Let's move now to the present situation where interest rates are negative and, hence, we have to fit a little bit the reasoning as follows. The Central Bank buys from the private bank the bond at premium (that is with an implied negative coupon) meaning that the Central bank gets losses due to this investment. On the other side it gets a gain from the negative yield on the

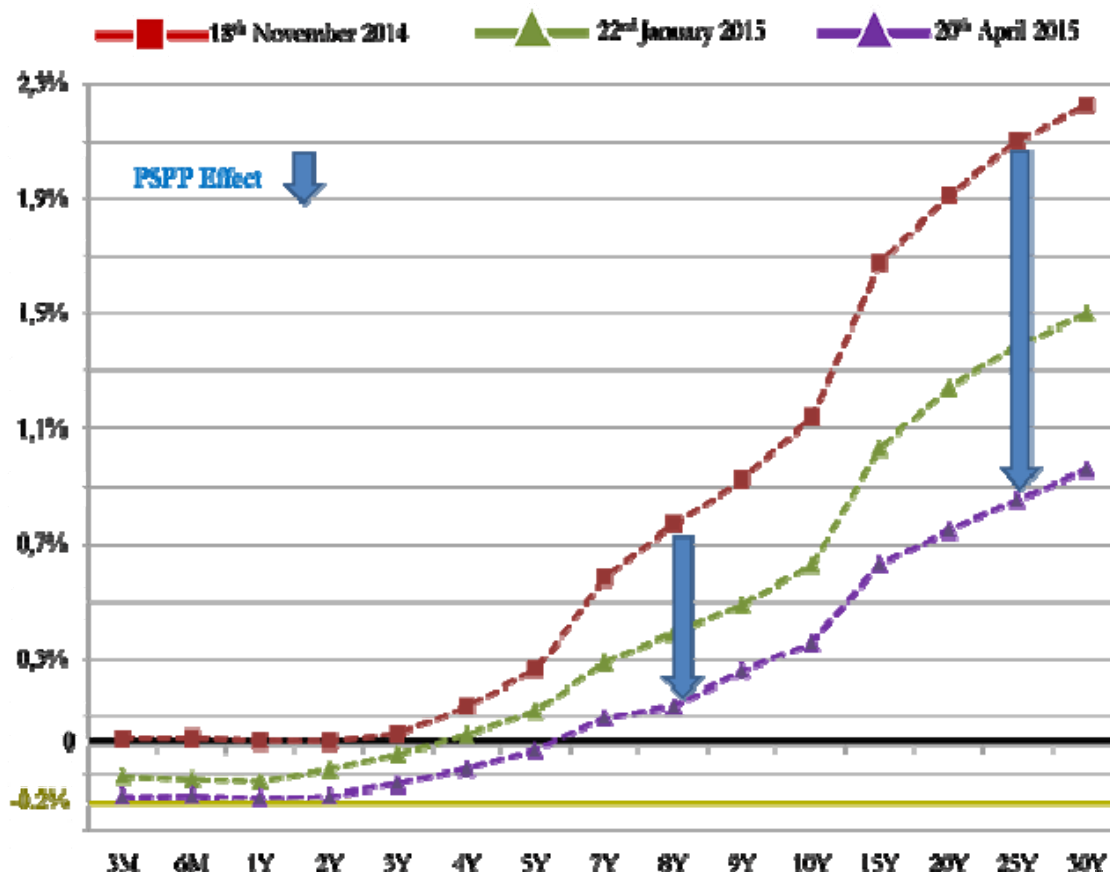
deposit account of the private bank (currently -0.20% within the Eurosystem). From the point of view of the Central Bank this game rules out losses as long as the interests it receives on the deposits of the private bank are higher or equal to the implied coupon of the bond purchased. Hence it is clear why the PSPP requires that the eligible Govies should have yields higher or equal to -0.2%.

It is also helpful to understand intuitively where the capital gains of private banks come from.

To this purpose, it has to be observed the evolution of the yields' term structure of the two major member countries of the Eurozone from the PSPP's first informal announcement (of the 18 November 2014) and up to the 20 April 2015, date on which their yields have reached their all-time low.



Oat term structure



There is no doubt that those who had in their portfolio Eurozone sovereign bonds wouldn't have had no difficulty in achieving capital gains within of a Eurosystem as redesigned by the QE.

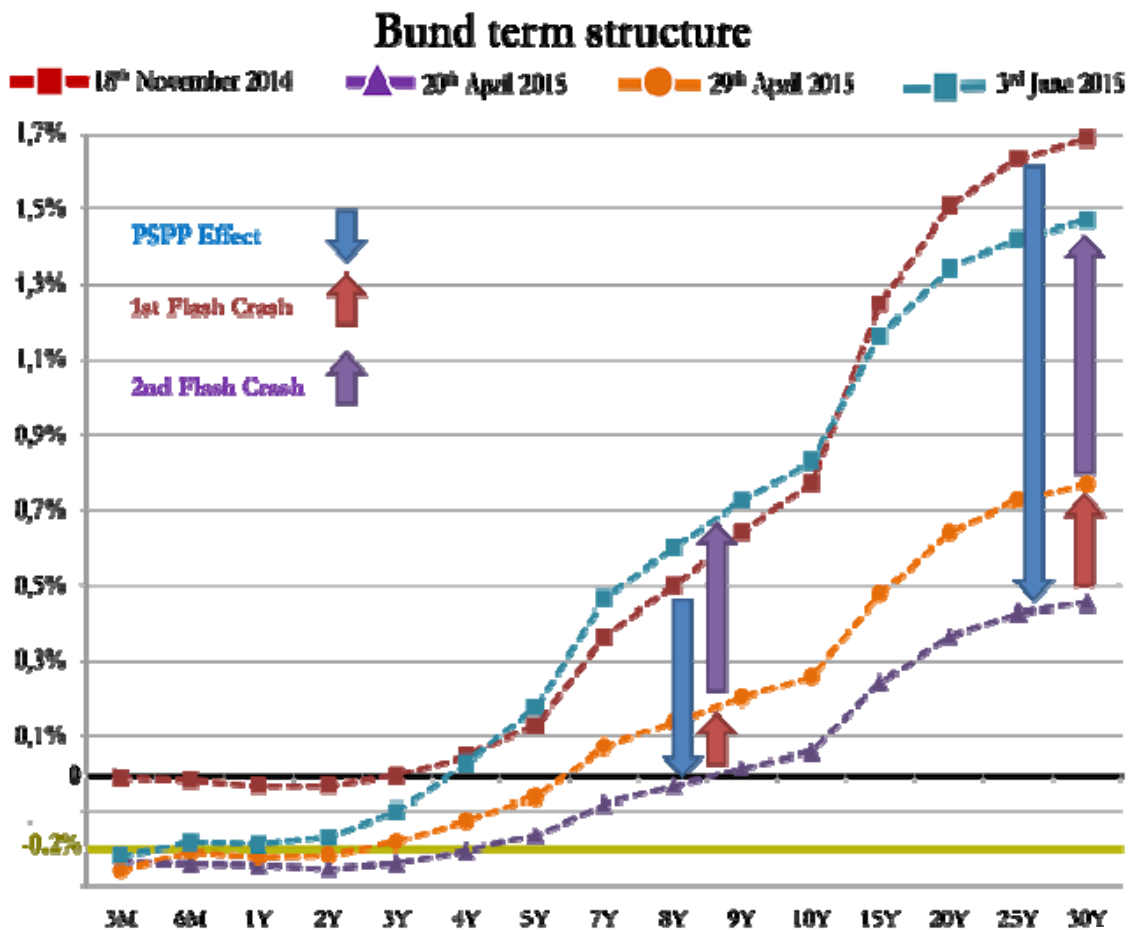
Within the core Eurozone countries since mid-April - that is in an environment of zero (or even negative) rates, with less and less eligible securities for the PSPP, with vanishing liquidity in the secondary market and with new bullish expectations on inflation - banks could easily push up the term structure of interest rates.

Also because if rates were not risen it would have been more difficult to implement trading strategies that could profit from the reduction in interest rates determined by the NCB's purchases.

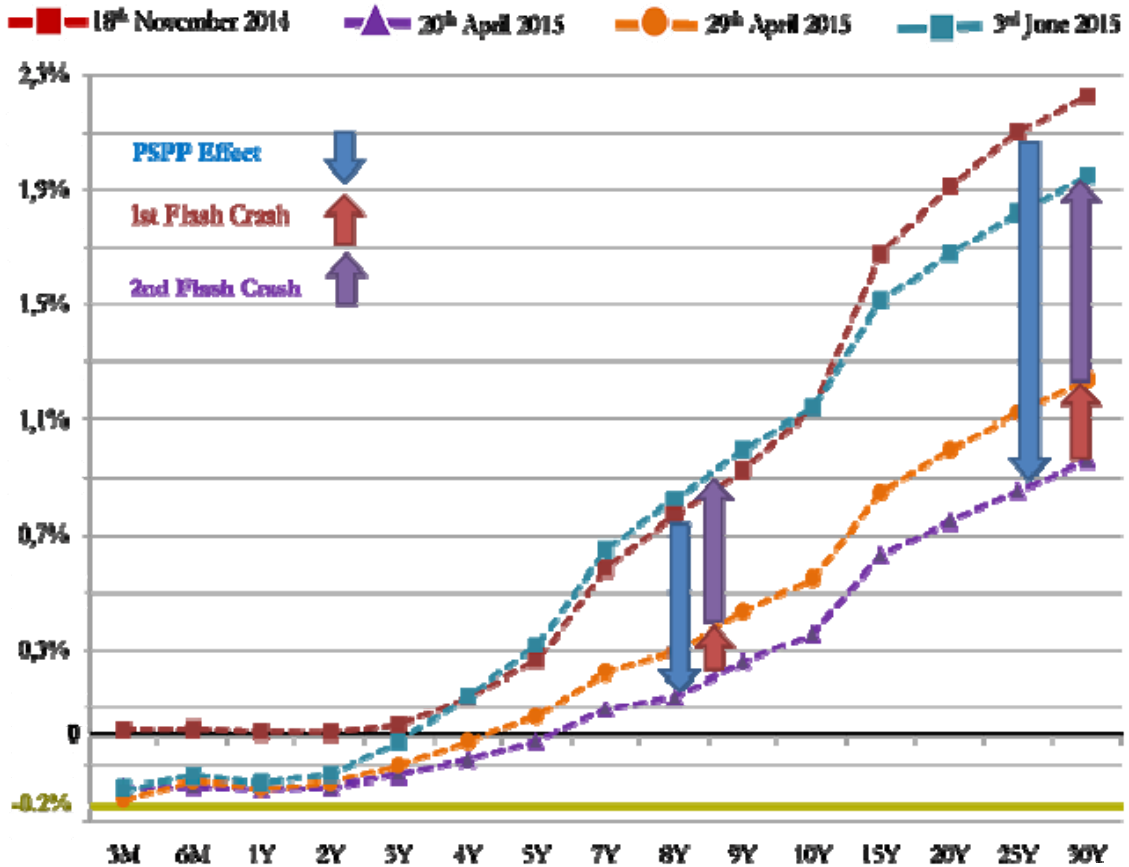
And after all the rise in interest rates also met the ECB's desires since at that time about 25% of the Eurozone Govies was displaying negative rates and was no longer eligible for the PSPP by increasing the risk that the program could run out.

It is the first flash crash and, as expected, after the upward jump followed bearish retracements of the interest rate term structure with higher volatility as it happens in an increasingly less liquid market.

Confirmations of this interpretation of the market behaviors arrive in early June with a second flash crash that exhibits the same pattern.

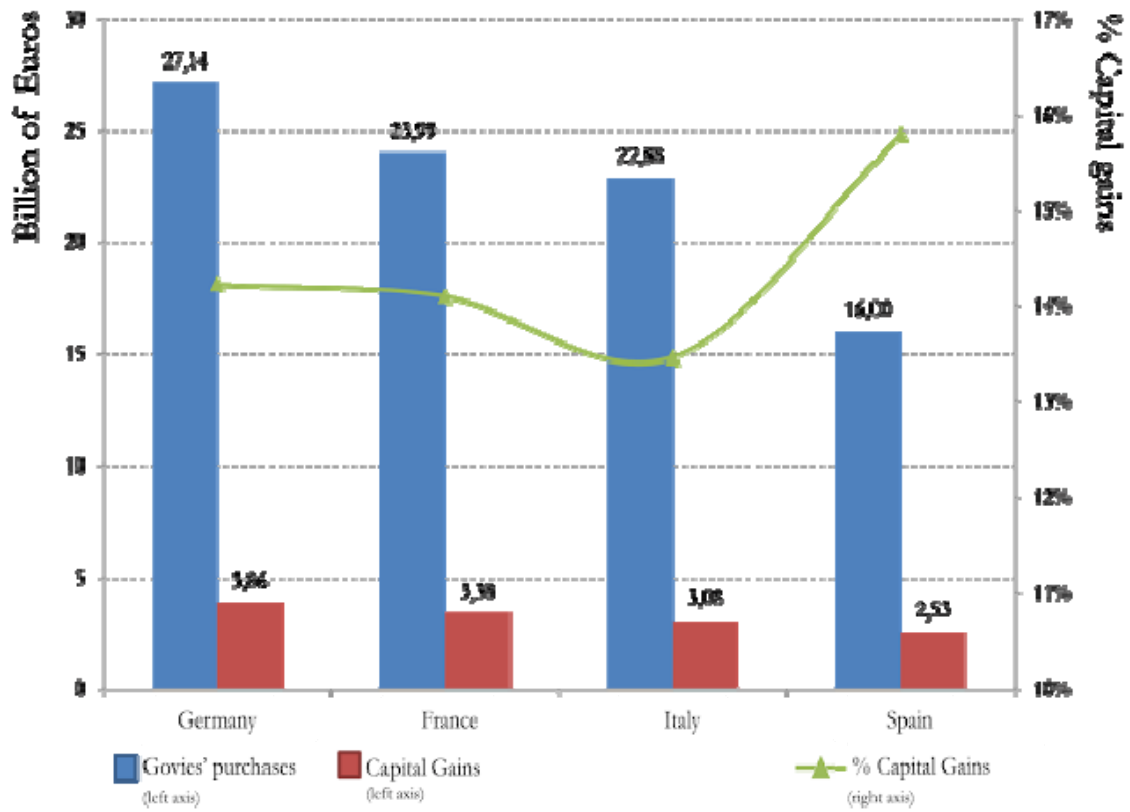


Oat term structure

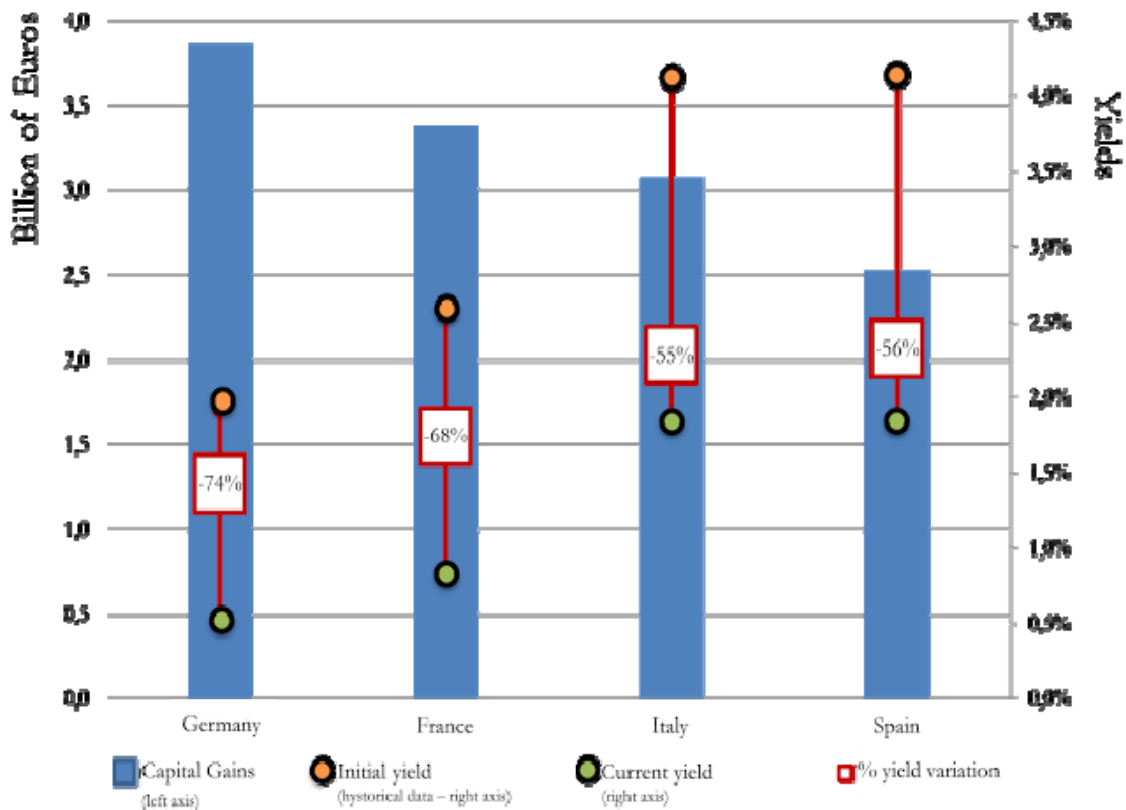


Following these trading schemes within the Eurosystem, banks have earned almost 13 billion euros; a new phenomenon arises: the QE's brokerage. Within this scheme of course Germany has done the lion's share thanks to the higher ECB's capital key and the fact that Bund yields were the lowest of the member states.

Govies' purchases within the PSPP and Banking system's Capital Gains



Banking system's Capital Gains and % variation of 10yr Govies yields



The complex architecture of the QE needed to avoid undue transfers between member countries does not seem to be on the right path.

The QE's brokerage is recapitalizing the banking system leading Eurozone banks' balance sheets to a scheme in which - for all the duration of the PSPP - Govies will be replaced by other Govies.

Meanwhile the ECB decision to delegate the bonds' purchases to the NCBs continues that process of nationalization of the public and private debts' risk, which began with the 1 trillion LTROs of late 2011-early 2012.

In fact LTROs started this process through the nationalization of public debt (i.e.: every banking system took care to buy the government bonds of its own country) and the settlement of inter-bank debts recorded on TARGET2.

In short, the ECB once again becomes a gear of this mechanism that adds centrifugal forces within the Eurosystem in which each member country has to undertake its own

risks.

It is perhaps appropriate to review the PSPP rather than waiting for its end (Autumn 2016) when the banks (once recapitalized through the QE's brokerage) will probably take care of the real economy.