RIVISTA DI

OLITICA

CONTRIBUTI SCIENTIFICI:

Michele Bagella Sergio De Nardis Stefano Fantacone Petya Garalova Matteo Lucchese Carlo Milani Marcello Minenna Mario Pianta Luigi Siciliani

Focus

RPE TERRITORIA

Il settore automobilistico sulla strada a senso unico dell'innovazione Francesca G.M. Sica

RIVISTA DI POLITICA ECONOMICA Fondata nel 1911

ondata nel 1911

2

Direttore Marcella Panucci

Direttore Responsabile Gustavo Piga

Comitato Scientifico

Presidente Mario Baldassarri

Mario Anolli Michele Bagella **Giorgio Basevi** Sebastiano Bavetta Leonardo Becchetti Pierpaolo Benigno Carlotta Berti Ceroni Magda Bianco Franco Bruni Giacomo Calzolari Roberto Cellini Daniele Checchi Bruno Chiarini Gabriella Chiesa Innocenzo Cipolletta Guido Cozzi Valentino Dardanoni Giorgio Di Giorgio Massimo Egidi

Riccardo Fiorito Michele Grillo Luigi Guiso Elisabetta lossa **Fiorella Kostoris** Luca Lambertini Stefano Manzocchi **Riccardo Martina** Alessandro Missale Giuseppe Moscarini Giovanna Nicodano Francesco Nucci Luigi Paganetto Luca Paolazzi Alberto Quadrio Curzio Annalisa Rosselli Lucio Sarno Valeria Termini

©Copyright 2015

2015

Indice

Invited Paper	
Pay for Performance and Quality in the Health Sector Luigi Siciliani	7
Invited Policy Paper	
<i>Focus</i> RPE TERRITORIA Il settore automobilistico sulla strada	
a senso unico dell'innovazione Francesca G.M. Sica	43
<i>Deficit</i> strutturali e politiche di bilancio: i limiti del modello europeo Stefano Fantacone - Petya Garalova - Carlo Milani	127
The European Public Debt Refinancing Program. Why the ECB Quantitative Easing Should Envisage Risk-Shared Euro-zone Government Bonds Marcello Minenna	153
Saggi scientifici	
Dal saldo del patto di stabilità interno al saldo euro-compatibile: un'applicazione ai comuni dell'Emilia-Romagna Massimiliano Ferraresi - Luigi Marattin - Leonzio Rizzo	183
Destra e Sinistra nella teoria economica Bruno Jossa	215
Does a Country-Specific Productivity Matter in Delocation Tendencies? A Footloose Capital Model Approach Federica Orioli	243

The European Public Debt Refinancing Program. Why the ECB Quantitative Easing Should Envisage Risk-Shared Euro-zone Government Bonds

Marcello Minenna*

Università Commerciale "Luigi Bocconi", Milano

The credit risk exposure of the German banking system is growing again after the 2009 peak and its subsequent reduction. This column comments it through the lens of the Target2 net balances in connection with the capital flows experienced by the Eurozone (EZ) balance of payments. Under this perspective it is illustrated a set of gradual proposals in order to improve the euro architecture, restore the uniqueness of the euro interest rate term structure, exit from the crisis and undertake a path of sustainable growth for all the member countries: notably, among them, the European Public Debt Refinancing Program. [JEL Classification: E52; E58; G01; G21].

Keywords: public debt; trade unbalances; quantitative easing; monetary policy.

* <marcello.minenna@unibocconi.it>, Department of Finance.

3

gennaio/marzo 2015

M. MINENNA

1. - Introduction

The credit risk exposure of the German banking system is growing again after the 2009 peak and its subsequent reduction. This column comments it through the lens of the Target2 net balances in connection with the capital flows experienced by the Eurozone (EZ) balance of payments. Several aspects arise. LTRO program launched at the end of 2011 served to deleverage the EZ banks. This happened by mutualizing the German banks' credit risk on the Eurosystem and by transferring on the EZ peripheral countries the risks of their national public debts. Moreover the German massive lending activities are part of a more general vendor financing scheme that in a first phase was structured substantially within the EZ while now is moving outside European borders. These dynamics have been considered by the ECB in the fist part (September 4th, 2014) of the unconventional monetary policy measures. This part of the Quantitative Easing (QE) will envisage purchases by the Central Bank of Asset Backed Securities (ABS) "simple and transparent" of high and medium-high quality but only insofar as the ABS will not have as underlying assets credits granted outside Europe. This measure would hence exclude the possibility for the German banking system of mutualising on the Eurosystem the credit risk arising from the new world-wide vendor financing scheme. The QE would also provide for the purchase of Covered bonds by the ECB. Anyway, given the characteristics of medium-high standing provided by the QE, it is likely that a significant portion of the assets affected by this purchase program will come from German banks. Behind this private debt side of the QE it can be glimpsed the risk that once again ECB interventions could bolster the mutualisation of German banks' credit risk (except for the portion originated extra-EZ) on the Eurosystem instead of moving once for all towards the mutualisation of EZ countries public debts. Unfortunately this issue is not properly addressed also by the second part of the QE decided on the 22nd of January 2015. The ECB, in fact, will directly purchase government bonds of the Eurozone only for the 8% of the QE, hence mutualising the associated risks, and it will provide liquidity to the national central banks for 1 trillion to allow for the purchase of government bonds (80% of the QE) and of bonds issued by supranational European institutions (12% of the QE). From the financial point of view, the scheme adopted for the QE resembles to a mix of credit derivatives pursuing a process of risks nationalisation that in the long-term could reduce the interests of the member States in carrying on the integration processes of the Eurozone. Finally under this perspective it is illustrated a set of gradual proposals in

order to improve the Euro architecture, restore the uniqueness of the Euro interest rate term structure, exit from the crisis and undertake a path of sustainable growth for all the member countries: notably, among them, the European Public Debt Refinancing Program.

2. - Eurozone Spreads: Impact on EZ Countries Competitiveness

Under the EU Treaties, the European Central Bank is prohibited from printing money in order to finance the public deficit or debt of the Eurozone (EZ) member countries, thus making it impossible to share (*i.e.* "to mutualise") the financial risks connected with the EZ public debt.

The Eurozone is burdened by approximately 9,000 billions of euros of public debt that, in terms of Debt to GDP ratio, accounts for an amount which is well below the 100% threshold. This value should be compatible with a stable economic area not heavily affected by systemic risks, considering that both Japan and US have much higher Debt to GDP ratios. International capital flows towards Europe should be regular and predictable.

On the contrary, the lack of structural rules that enforce the EZ mutualisation of risks has brought financial operators to appreciate the differences in credit risk amongst countries relying on a yield spread on Government Bonds (Govies). Sovereign spreads persistently ranging over time from 1% to 6% – like those Italy and Spain have been witnessing since 2008 – inevitably contribute to increase the interest expenses the manufacturing sector has to bear (Graph 1).

On the other hand, such an increase is more significant than the one caused by the inflation spreads between Germany and the other EZ countries in the years before 2008. These higher costs are necessarily transferred onto sales prices when wages cannot be further compressed; this means that the countries that sell more goods manufactured within the EZ, whose competitiveness is based on price (accounting for a large share of the GDP value), are those whose spread is lower, *i.e.* Germany.

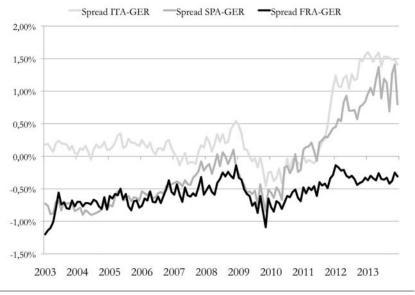
In addition, the EZ excess demand for the German goods doesn't result in neither an appreciation of the German currency nor a reduction in the Germany's trade balance since the all the EZ member countries share the same currency.

Hence a first explanation of the 12 years of German trade surplus; something unique within the EZ given that all other countries have been featuring generalized trade deficits for some years now (Graph 2). The EZ Peripheral Countries (EZPC, *i.e.*: Italy, Spain, Portugal, Ireland and Greece) trade surplus in 2013

doesn't contradict this conclusion since it is determined by their imports collapse.

Graph 1





Source: Bloomberg Data Provider.

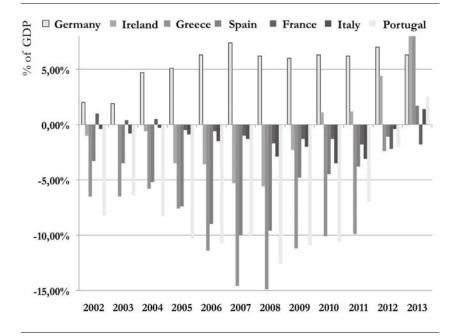
However, more is needed to account for such a dysfunction in the EZ real economy. We should investigate the architecture of the Euro and, in particular, the interbank settlement system also known as Target2. This system controls financial flows between EZ private and central banks and displays over time a persistent credit of Germany towards the EZPC (Graph 3).

To better understand the meaning of this net balance let's quote an example to show how Target2 works: when an Italian bank writes off a debt of 100 euros to a German bank, the settlement takes place through Target2. Accordingly, Bundesbank becomes a net creditor to the Bank of Italy. It sounds like a mere bookkeeping exercise, but there's more to it. Before this settlement system was put in force, if the Italian bank had not paid back its debt, the German bank would have M. MINENNA

incurred a loss and, in case of default, only the German government could have helped it. It is indeed useful to remember that under EU rules (article 125 of the Treaty on the Functioning of the European Union) a supranational entity cannot bailout a failing private bank. Furthermore, for the time being, the banking union and the much-discussed Single Resolution Mechanism are far from being implemented, both in terms of regulatory definitions and of financial commitments.

Graph 2

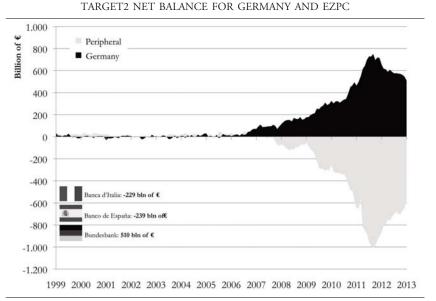
BALANCE OF TRADE OF GERMANY, FRANCE, ITALY, SPAIN, PORTUGAL, IRELAND AND GREECE



Source: EUROSTAT.

M. MINENNA

Graph 3



Source: National Central Banks.

3. - Target2 Payment System as a Measure of the EZ Systemic Risk

Going back to our example, after the settlement, once the credit of 100 euros is carried to the Bundesbank balance sheet, it is guaranteed by the Eurosystem which operates as lender of last resort due to the only fact that a single currency exists: the Euro. This means that the credit risk of the German bank determined by its credit of 100 euros towards an Italian bank has been transferred to the ECB, thus basically mutualised amongst all the Eurozone countries.

In light of the above it is also possible to argue that within the net balance of the Target2 payment system it is nested a systemic risk for the EZ. To clarify this point it is enough to consider what could have happened in November 2011 if Greece would have left the Eurozone. It has to be remembered that at that time the Prime Minister George Papandreou launched a referendum proposal regarding the permanence of the Greece within the EZ and that the Greek central bank had a negative Target2 net balance of 123 billions of euros. In case of leaving the

EZ it was likely that this debt would have not been paid back partially or entirely with the effect that the Eurosystem (net of Greece) would have to bear these losses. In other words behind the Target2 net balance there is a close connection between the Euro existence and a systemic risk for the EZ countries.

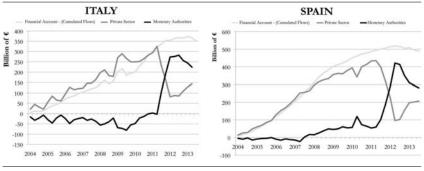
4. - EZPC's Financial Account and the LTROs

Further considerations come out from a focus on the Financial Accounts of the biggest EZPC countries, *i.e.* Italy and Spain which at the end of 2013 were also the main contributors (with 470 over 510 billions of euros) of the Germany Target2 positive net balance (Graph 3).

At the end of year 2011, the analysis of the capital flows on a cumulated basis reveals that the Financial Account exhibits a perfect substitution between the Private Sector outflows and the Monetary Authorities inflows (Graph 4).

Graph 4

FINANCIAL ACCOUNT (CUMULATED FLOWS): BREAKDOWN BETWEEN PRIVATE SECTOR AND MONETARY AUTHORITIES



Source: EUROSTAT.

This has been the result of the 1 trillion Euro LTROs implemented by the ECB at the peak of the financial crisis (end of 2011 - beginning of 2012).

Moreover, in the same period Bundesbank dramatically increased its Target2 positive net balance with respect to Bank of Italy and Bank of Spain till to reach its peak level of about 750 billions of euros (Graph 3). This means that the Italian and Spanish financial system were settling their transactions concerning both the writing off of their debts towards Germany and the purchase of their national public debts.

The above described dynamics indicate that the ECB's non-standard monetary policy measures have eventually allowed the German financial system to reduce its credit risk exposure towards Italian and Spanish private and public debts. In order to provide evidence of this phenomenon it is useful to consider that:

- Italian banks received 270 billions of euros by the ECB, of which 220 were used to buy Italian Treasuries (even if not all this amount corresponds to German banks' deleveraging) and 70 to write off their debts (also the non-commercial ones) towards Germany;
- Spanish banks displayed a similar but symmetric behaviour due to the greater weight of the private debt w.r.t. the public one; they received 310 billions of euros by the ECB, of which 270 were used to write off their debts and 40 to buy Spanish Treasuries.

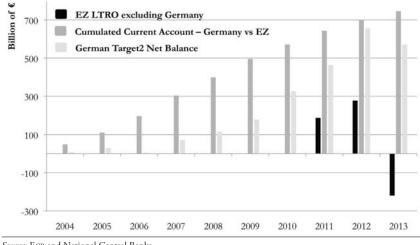
5. - Germany's Current Account and the Mutualisation of the German Financial System Credit Risk on the Eurosystem

This conclusion is also supported from the joint analysis of the Germany's Current Account with respect to EZ, its Target2 net balance and the LTROs borrowed by EZPC (Graph 5).

The positive trend exhibited by the Current Account on a cumulative basis is consistent with the Germany's trade surplus recorded in the last 12 years (Graph 2). But it has to be noticed that till the implementation of the 1 trillion Euro LTROs the Germany's Target2 net balance didn't show a similar growing trend. In other words the Germany credit balance towards the Eurozone deriving from the trade surplus was not settled. Once the LTROs were granted, EZPC countries were in the condition to write off the debts underwritten to finance their purchases of German goods and thus Germany could transfer towards the Eurosystem its credit risk exposure w.r.t. EZ. Coherently with this scheme the need for liquidity in order to reimburse the LTROs determined in year 2013 a reduction in the Germany's Target2 net balance by highlighting once again an increase in the German credit risk exposure w.r.t. EZ.

The ratio between the Target2 net balance and the cumulative Current Account w.r.t. EZ (Graph 6) provides a good proxy of how much of the German credit risk exposure w.r.t. EZ deriving by its trade surplus has been transferred over time towards the Eurosystem.





Source: ECB and National Central Banks.

Graph 6

GRAPH 5

CREDIT RISK TRANSFERRED FROM THE GERMAN FINANCIAL SYSTEM TOWARDS THE EUROSYSTEM



Source: ECB and National Central Banks

M. MINENNA

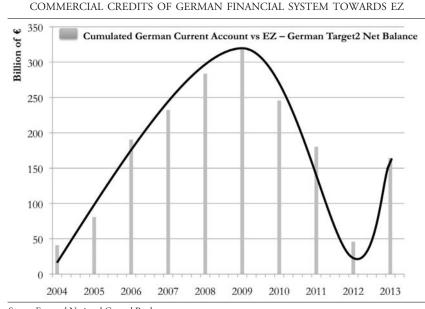
At the peak of the crisis more than 90% of this risk has been transferred towards the Eurosystem. This impressive figure confirms the well-known fact that the ECB's non-standard monetary policy measures have saved the EZ banking system from the collapse by adding also the information that this result has been reached by saving the German banking system.

6. - The German Vendor Financing Cycle

By the same token it can be computed a proxy of the amount of credits granted by Germany to EZ related to its trade surplus just by subtracting the Target2 net balance from the cumulative Current Account w.r.t. EZ and (Graph 7).

An interesting cyclical pattern emerges when observing the trend of German banks' credits towards other EZ banking systems. As already mentioned the credits have substantially decreased after the implementation of the ECB's 1 trillion Euro LTROs between December 2011 and February 2012. On the contrary, before the ECB's intervention Germany has increased its credit granted to EZ in order to finance its trade surplus. In other words Germany has simply bolstered a *vendor financing* scheme. Thanks to the LTROs, EZPC's banks had the liquidity to write off their debts with Germany up to an amount of about 300 billions of euros (of which Italy paid back 30 billions and Spain 200 billions). By this way it has been realised the *deleveraging* of the EZ banking system and by resorting to Target2, German banks managed to significantly transfer towards the Eurosystem their credit risk exposure to EZPC determined by the *vendor financing*.

After this first phase, in 2013, German banks started a new cycle of *vendor financing*, by steadily increasing their credits, while the other EZ banks reimbursed the LTROs to the ECB. This time, though, things went slightly differently: *austerity* measures contributed to compressing the EZPC countries demand, hence making it difficult for them to absorb further German exports and for their banks to increase debts towards German banks. This role now is partially played by France due to its increasing weight within both the Germany's cumulative Current Account and the credits of German banks towards EZ (Graphs 8 and 9).

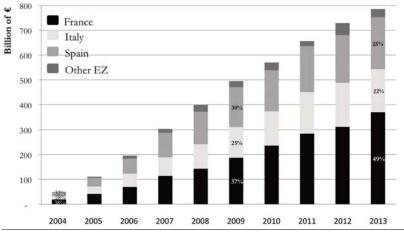


Source: ECB and National Central Banks.

Graph 8

GRAPH 7

GERMANY CUMULATIVE CURRENT ACCOUNT W.R.T. EZ - BREAKDOWN BY COUNTRIES



Source: ECB and National Central Banks.

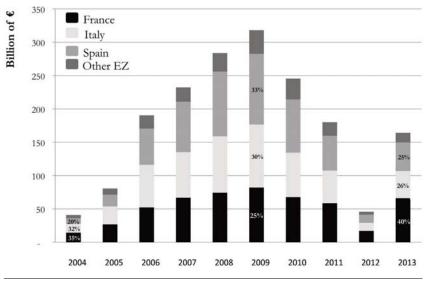
gennaio/marzo 2015

It is also not a coincidence that over the last few semesters the share of German exports towards extra-EZ countries has been increasing and accordingly its banking system has been granting credit outside Eurozone, as it is shown by the growing quota of extra-EZ countries within both the German Cumulative Current Account and the total credits granted by the German banking system (Graphs 10 and 11).

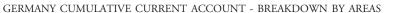
In other words the new cycle of the Germany's *vendor financing* is going to be structured outside Europe given the collapse of EZPC countries' internal demand. This world-wide attempt is not an easy task given the wider competitive arena together with the dynamics of exchange and interest rates belonging to different currencies areas. Germany is in fact used to face an easier task within the EZ – as long as a sufficient internal demand exists – by exploiting its financial competitive gap (the spreads) and the uniqueness of the currency.

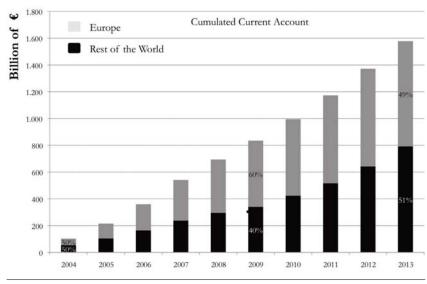
Graph 9

COMMERCIAL CREDITS OF GERMAN FINANCIAL SYSTEM TOWARDS EZ -BREAKDOWN BY COUNTRIES



Source: EUROSTAT.



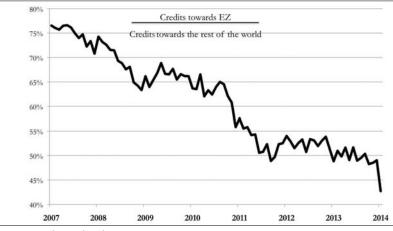


Source: EUROSTAT.

GRAPH 11

GRAPH 10

CREDITS OF GERMAN FINANCIAL SYSTEM - BREAKDOWN BY AREAS



Source: National Central Banks

gennaio/marzo 2015

M. MINENNA

7. - How the ECB's Quantitative Easing Works

The increase of credits of the German banking system towards extra-EU countries in order to bolster a new world-wide vendor financing scheme was taken into account by the ECB when it has defined the features of the last QE announced in September 2014. It is not a coincidence that the ECB has excluded the purchase of Asset Backed Securities (ABS) having extra-EU private debt side of the as underlying assets.

The inclusion of this kind of credits within the basket of admissible ABS underlying would have allowed German banks to mutualise again their risk exposure (this time related to credits granted to extra-EU countries) on the Eurosystem through the securitisation of these credits and their consequent sale to the ECB or their posting as a collateral for refinancing operations.

With this intervention the ECB has therefore avoided to extend also to the risky exposures held by German banks outside the EZ the mutualisation mechanism described in this paper in relation to the LTRO measures; these measures had in fact enabled the mutualisation on the Eurosystem of the German credit risk originating from its Eurozone trade activities.

The other condition defined by the ECB for the QE – *i.e.* to accept only high and medium-high quality ABS and covered bonds – clearly makes the German banks the number one candidate to access the liquidity that the ECB will inject in the system through this program of private debt purchases. It follows that the traditional vendor financing scheme within the EZ will resume as soon as there will appear early signs of recovery in domestic demand, with obvious advantages for the German financial and economic system.

Anyway, as already said, it has to be appreciated the ECB's decision to avoid creating a monetary policy framework that would have made Germany able to replicate the vendor financing scheme on a world-wide basis. In fact, this would have been critical for the survival of the EZ as it would have boosted the Euro disruptive phenomena by confirming the Eurosystem as a tool for settling the persistent trade imbalances among the EZ countries associated with the German current account surplus.

Unfortunately the second part of the QE announced on the 22nd of January does not operate in the direction of strengthening the integration between the EZ countries. Only apparently it seems to support an improved risk sharing process within the member States while it actually pushes towards the nationalisation of risks in the short-term and in the long-term reduces the interests of the member States in keeping the Euro alive.

With this intervention the ECB envisages the purchase of more than 1 trillion bonds, which will be shared in a buying programme of 60 billion a month for a duration of 18 months. The weakness of the measure is in the allocation of risks behind public debt securities. To understand why, it is useful to remember that within the best practice of the central banks of the world the purchase of government bonds is conducted without paying interests and without discriminatory treatment on the risks of public debts of different member countries. These "gold rules" have not inspired the QE launched by the ECB because of a theory mainly German-made - that their application would have created an undue mixture between monetary and fiscal policy and encouraged the moral hazard of the periphery. In fact, the ECB will directly purchase government bonds of the Eurozone for around 100 billion (8% of the QE), hence mutualising the associated risks, and it will provide liquidity to the central banks for 1 trillion to allow for the purchase of government bonds (80% of the QE) and of bonds issued by supranational European institutions (12% of the QE), including the ESM, i.e. the former sovereign bailout fund, which will likely have a relevant share. The purchase of bonds will be based on the share of each country in the Eurosystem and the buyers will retain the interests.

At the end of the purchase the national central banks will have ensured the ECB from risks of losses in value which could occur on that portion of the public debt of member States that will be interested in the program. In other words, by finishing in the assets of the national central banks, those government bonds become de facto subjected to foreign law, and as such, if the member country were to leave the Euro it could not reduce the value of the bonds by redenominating in the new national currency and then devaluing them, but it would be required to repay their full face value in Euros to the ECB.

From the financial point of view, the scheme adopted for the QE is therefore that of credit derivatives. In more explicit terms, the national central banks are selling a credit default swap to the ECB and they are cashing the premium.

By taking on these risks, the national central banks will be remunerated through the interests on the government bonds purchased, therefore according to the same criteria of asymmetric distribution followed for the risks. The interests retained by the national central banks compensate for the guarantees given to the ECB for the risks of national public debt of the Eurozone included in the programme.

As for the purchase of bonds issued by European institutions (12% of the total), including an important role that will be taken on by the ESM, any loss in value will instead be borne by the member States according to their percentage

M. MINENNA

of participation to the Fund (27% Germany, 20% France, 18% Italy and so on), given that the risks related to these bonds have been shared. In reality, at least for the bonds issued by the ESM, if one takes into account that for this Fund the risks have already been shared out by statute, the QE creates a sort of mutualisation to the square. Therefore, it is important to investigate the reasons for a similar decision. A possible explanation comes from the composition of the risks of the ESM that sees a significant amount occupied by the public debt of Greece. Its restructuring would determine losses in excess of the capital base of the ESM; therefore it seems that, in the doubt that in the future a member state may decide not to participate in the recapitalisation of the Fund, the QE will have pre-emptively resolved the problem by securely transferring the risks of such excess losses to the national central banks.

Also in this case the scheme follows the financial point of view of the credit derivatives.

The argument can now be completed by referring to the 8% of the purchase of government bonds carried out directly by the ECB and whose risks are therefore shared at a European level. In this case, the credit derivative is sold by the ECB and bought by the member states of the Eurozone.

The decision announced on the 22nd January is therefore not financially fair, nor are there "gifts" to "weak" countries of the periphery, and has little taste of United States of Europe.

8. - What the ECB Could Do: A Monetary Policy at the Service of the Real Economy

The analysis made should have clarified a fundamental point: the Euro zone is in a dysfunctional state from its inception and the trade and financial unbalances that have been cumulated over time have now precipitated the peripheral economies in a situation of deep recession, deflation and high unemployment.

This means that any measure undertaken – even if structural – cannot solve in a definitive way the financial and economic problems of each troubled country. In the case of Italy, it is undoubtful that there are structural nodes to untangle, such the administrative and justice reforms, the fight against corruption and tax evasion; nevertheless, an effort exclusively focused on these issues will be not enough to restore a steady growth path for GDP and employment.

Not surprisingly, a concerted action should be taken at European level to solve in a coherent way the puzzle of too many independent fiscal policies. However, with a reasonable level of realism, it has to be accepted that at the moment only the monetary policy can act in a coordinated way on the whole Euro zone. In particular, the Eurozone needs a systemic intervention of the ECB on the markets, aimed to an interest rate control policy (the "zero spread" target), with a shift from the actual inflation driven policy. Accordingly, we will focus our attention on a set of implementable measures by ECB that would allow to obtain appreciable results in the short-medium term.

9. - The Suspension of Interest Payments on Government Bonds to the ECB

At the present state, the ECB detains in its assets, about 300 billion of euro of Eurozone government bonds, mainly of peripheral countries; around half has been bought through the *Securities Market Programme*, between 2010 and 2012. Those bonds are naturally producing interests, that are paid to the ECB by the issuer countries. In particular, the Italian government pays 4 billion yearly on the bonds that are in the ECB balance sheet.

According to its statute, the ECB redistributes those interests to the Euro zone central banks proportionally to the subscribed capital; this implies that over 4 billion of euro are transferred by the ECB to the Bundesbank. 1,5 billion of the overall sum of 4 billion are paid by the Italian government and contribute to the nominal deficit of the country, that cannot overcome by the Maastricht Treaty to the 3% yearly.

Paradoxically Italy, together with other peripheral countries is charged financially – in a way that affects its budget policy – by a program that is aimed to support its economy in a troubled period. Furthermore, if it is considered that the ECB does hold negligible quantities of BUND it appears clearly the hidden transfer of financial resources from peripheral countries to Germany connected with the SMP program.

In this perspective, an immediate measure could be the suspension of the payment of interests on government bonds in ECB the balance sheet; a rough estimate quantifies the benefit for the peripheral countries in 10 billion of euro. This will free fresh financial resources to be destined to specific projects to sustain growth and employment, that at the present state are not implementable.

10. - The European Public Debt Refinancing Program (EPDRP)

GRAPH 12

The ABS purchase program moves in continuity with the ECB's decision, taken in June 2014, of maintaining in its balance sheet the 160 billions of euros of EZPC Govies purchased under the 2011 Securities Market Program and denotes a new vision of the Eurosystem that does not favour disruptive phenomena.

This does not suffice. If non-standard monetary policy measures have sometimes allowed to mutualise on the Eurosystem the credit risk of the German banking system, then similar interventions of the ECB should also permit to mutualise the financial risks connected with the EZ countries public debts.

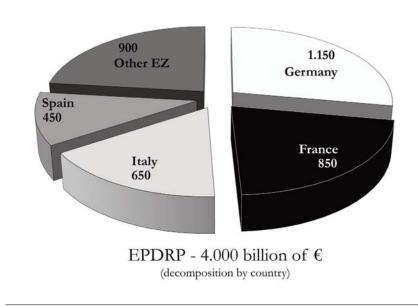
A first step towards this direction could be to envisage the purchase of Govies by the ECB through a European Public Debt Refinancing Program (EPDRP). Moreover, as it happens in the US with the Treasuries purchased by the FED, the EZ countries should not pay interests on the bonds covered by the Program.

The interruption in paying interests on public debts held by the ECB would level the EZ countries to Germany, that is the only country in the Euro area which currently pays on average zero interest rate for its debt refinancing due to negative short interest rates and flight to quality phenomena.

In addition, the EPDRP should entitle the EZ countries to refinance their debts with long-dated bonds purchased by the ECB till an amount corresponding to the 40% of their GDPs, namely around 4 trillions of euros. A similar expansion of the ECB balance sheet would not be so unusual for a Central Bank neither in the size nor in the assets' class (Govies). For instance, in the US the Federal Reserve currently holds *de facto* around 4 trillions of dollars of public bonds on which it does not earn any interest: around ½ were issued directly by the US Treasury and the other ½ are Mortgage Backed Securities issued by the public companies Fannie Mae and Freddie Mac which are almost entirely owned by the US Treasury.

It should also be considered that by using the GDP as a *numéraire* the German skepticism towards similar measures of sovereign risks' mutualisation would be contained since Germany would have the largest share of the Program (Graph 12). Germany would join the Program with a public debt refinancing of about 1.150 billions of euros, doubling Italy and tripling Spain.

EUROPEAN PUBLIC DEBT REFINANCING PROGRAM – BREAKDOWN By Countries



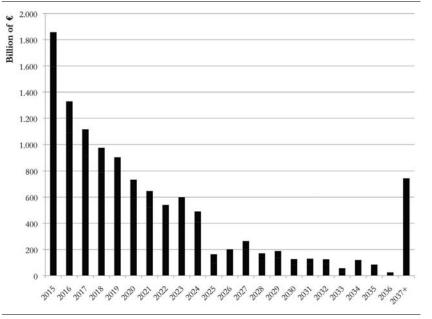
Source: Author.

The size of the Program should be spread over almost 4 years given the average duration of the EZ countries' public debts (Graph 13). The EPDRP would dramatically reduce the amount of public debt traded on the secondary market and determine the suspension of auctions for almost 4 years.

18

Graph 13

TERM STRUCTURE OF THE EZ COUNTRIES' PUBLIC DEBTS



Source: Author.

The duration and extent of the program for the different countries would vary in relation to both the GDP size and the term structure of the public debt (Graph 14). Germany would be supported by the Program for 4 years, France for 3 and Italy and Spain would exhaust it in about 2 years.

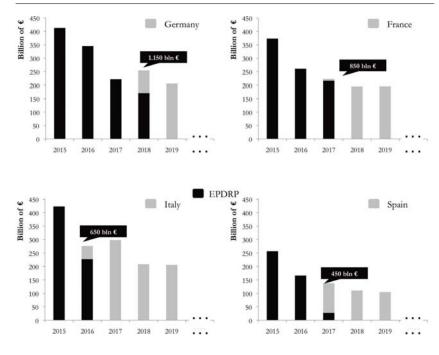
The Program would support the convergence of the term structure of interest rates of the different EZ countries towards a common level. In other words the spread phenomenon would disappear and the Euro would go back to "normality" by exhibiting a unique interest rate term structure as all the currency areas worldwide.

The Program would support the convergence of the term structure of interest rates of the different EZ countries towards a common level. In other words the spread phenomenon would disappear and the Euro would go back to "normality" by exhibiting a unique interest rate term structure as all the currency areas worldwide.

Under this perspective, the hypothesis of accompanying with a priority clause the Govies covered by the Program (in order to provide the Eurosystem with a guarantee in front of the mutualisation of the sovereign risks realised by the Program itself), should not significantly affect this convergence trend. In fact, the subordination of the EZ public debts excluded from the EPDRP should not be relevant given the dimension of the Program and the relevance of the Eurozone's strengthening signal transmitted to the market.

Graph 14

EUROPEAN PUBLIC DEBT REFINANCING PROGRAM – DURATION AND EXTENT OF THE INTERVENTION FOR THE MAIN EZ COUNTRIES

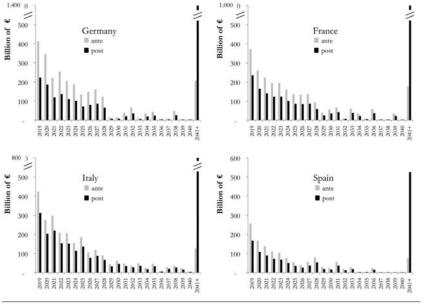


Source: Author.

M. MINENNA

Graph 15





Source: Author.

It is worth mentioning that the EPDRP would not modify the magnitude of the public debt of peripheral countries but it would realise a "soft" re-profiling of this debt, since each EZ country would refinance its debt with long-dated bonds (40 years maturity) purchased by the ECB (Graph 15).

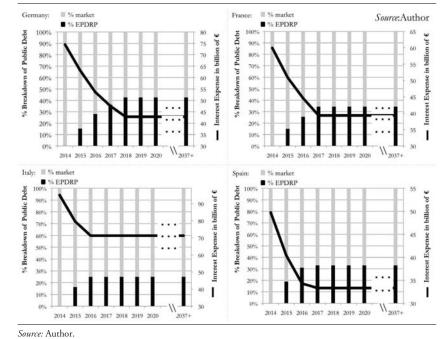
Furthermore, the interests cost paid by the EZ countries would reduce yearly according to the Program by reaching 90 billions of euros at the end of the fourth year. In this way it will release financial resources that could contribute to relaunch the economy of the Eurozone and to implement policies aimed to respect the "fiscal compact" targets, admitted that this will continue to be a relevant issue (Graph 16). In particular, Germany would be entitled to receive the largest benefit with an interest saving of above 30 billions of euros, France and Italy saving would be above 20 billion and Spain about 15.

The EPDRP would have also the clear advantage of creating monetary base for a long period of time and thus also the necessary conditions for a recovery in the EZ

domestic demand as well as to contrast the current deflation phenomenon within the euro area and bolster the ECB to reach its statutory inflation target of 2%.

GRAPH 16

EUROPEAN PUBLIC DEBT REFINANCING PROGRAM – SAVING ON THE COST FOR INTEREST ON THE PUBLIC DEBT FOR THE MAIN EZ COUNTRIES



11. - An Alternative Proposal to Partially Monetise the Debt

The threat of deflation is now undermining all Euro zone economies, striking harder in Italy. The worse consequence of deflation is connected with the dynamics of the Debt /GDP ratio: since the GDP is expressed in nominal terms, the deflation reduces its value while the debt is revalued in real terms. This means that, without considering what happens to the *deficit*, the Debt / GDP ratio tends to deteriorate very quickly. Let's consider the case of Japan in the years 1990-2010: after prolonged periods of deflation, the Japanese Debt /GDP ratio has grown from 70% of 1990 to 240% of 2013.

gennaio/marzo 2015

M. MINENNA

In this context, an extraordinary measure of partial monetisation pursued by ECB will hit simultaneously debt and deflation and so it would look very appealing, without considering for the time being its political feasibility.

This intervention would be quantified proportionally to the GPD of the countries involved (and not in terms of debt dimension, as proposed elsewhere) and should exploit the financial mechanisms that have feed the crisis.

In detail, the measure should consist in the gradual purchase by ECB – modifying properly the ECB and ESM statutes – of 3.830 billion of euro of government bonds (an amount equal to the 30% of EU GDP). The bonds would be monetised by ECB at maturity, by following gradually the term structure of EU public debts; the minimum lifespan of this intervention can be estimated in 36/48 months.

The immediate effect of this proposal would be the reduction of Eurozone government debts. In particular, as can be inferred by looking at Table 1, the Debt/ GDP ratio of each country would shrink under the psychological threshold of 100% (excluding Greece).

The reduction of government debt will allow to the troubled countries to avoid the refinancing of debt for a reasonable period of time, thus implying the disappearance of public auctions and the related transmissions of pressures from the secondary to the primary market.

TABLE 1

CDD	AND	DUDUC	DEPT	OF	ELIDO 17	COUNTRIES
GDP	AND	PUBLIC	DEBI	OF.	EUKO-1/	COUNTRIES

Country	GDP	Debt	Debt/GDP	ECB Target	Debt/GDP
			Ante	(30% GDP)	post
Germany	2.737	2.245	82%	1095,04	42%
France	2.059	1.853	90%	823,7	50%
Italy	1.560	1.981	127%	624	87%
Spain	1.023	859	84%	409	44%
Netherlands	602	428	71%	241	31%
Belgium	381	374	98%	152,8	58%
Austria	313	229	73%	125	49%
Greece	182	286	157%	72,8	133%
Finland	194	103	53%	77,3	13%
Portugal	165	204	123%	66,26	83%
Ireland	164	192	117%	65,6	77%
Slovakia	72	38	52%	28,85	12%
Luxembourg	46	10	21%	10	0%
Slovenia	35	19	54%	14,11,5	14%
Ciprus	17	14	85%	6,6	45%
Estonia	18	2	10%	7,3	0%
Malta	7	5	72%	2,87	32%
				3830,9	

Source: EUROSTAT and Bank Of Italy - billion of euro December 31, 2013.

In particular, the suspension of the public auctions will bring the following benefits:

- an improved stability of financial flows connected with fiscal policies;
- the consolidation and acceleration of the convergence of the cost of debt to a sustainable level for peripheral countries;
- the reduction of the phenomena of *credit spread* and *collateral discrimination*; the increase of value for government bonds on the secondary market;
- the reduction of the phenomenon of spread intermediation by the European banking system;
- the improvement of patrimonial coefficients and the restart of financial support to the real economy;

acceleration of the convergence of the cost of debt to a sustainable level for

This proposal would also have the advantage to redistribute in a fair way the ECB contribution proportionally to the GDP (and not to the level of debt), resulting in this way more acceptable from the *core* countries (historically opposed to any form of debt monetisation). This means that in absolute value, the amount of German and French governments bonds cancelled out would be the highest between the Euro zone countries; this debt cancellation should compensate the foreseeable reduction of the financial benefits connected with the very low costs in refinancing the debt experienced during the crisis by the *core* countries.

The proposed solution would bring competitive advantages in the short term also for the banking systems of the *core* countries, in terms of the reduction of exposure towards the risks of peripheral countries. In fact, in the period immediately following the European debt crisis, German and French banks have tried to reduce the amount and duration of their peripheral bonds portfolio, while peripheral banks were increasing their share of national government debt. Consequently, the ECB asset purchases of short term bonds should benefit the banks of *core* countries whose portfolio is concentrated on the shortest maturities.

In synthesis, the ECB intervention could lower the excess of demand of *core* government bond by decreasing the *spreads*, while reducing at the same time the size of dangerous phenomena like *collateral discrimination* and *spread intermedi-ation*. Moreover, in the end, the process of divergence between interest rate curves will stop, together with the nationalization of public debts, by restoring the uniqueness of Euro zone interest rate curve.

By analogy with EPDRP program, the monetisation will have the undoubtful benefit to create permanent monetary basis, by enhancing the increase of production, public and private investments, and by abating the deflation expectations

M. Minenna

BIBLIOGRAPHY

AL-EYD A. - BERKMEN S.P., «Fragmentation and Monetary Policy in the Euro Area», *IMF Working Paper*, no. 13/208, 2013.

 $Bank \ of \ England, \ Monetary \ Policy \ Trade-Offs \ and \ Forward \ Guidance, \ August, \ 2013 \ .$

BANK FOR INTERNATIONAL SETTLEMENTS (BIS), «Consolidated Banking Statistics», http://www.bis.org/

BINDSEIL U. - KOENIG P.J., «The Economics of TARGET2 Balances», SFB, no. 649, *Discussion paper*, 2011, pages 2011-2035.

BLOOMBERG, Bloomberg data provider

BUNDESBANK, «Statistics», http://www.bundesbank.de/

COUR-THIMANN P., «Target Balances and the Crisis in the Euro Area», CESifo *Forum*, no. 14, 2013.

DE GRAUWE P., «The Governance of a Fragile Eurozone», *Economic Policy*, *CEPS Work-ing Documents*, 2011.

DE GRAUWE, P - JI Y. (2015), "Quantitative easing in the Eurozone: It's possible without fiscal transfers, *VoxEU.org*, 15 January.

EXPERT GROUP ON DEBT REDEMPTION FUND AND EUROBILLS, *Final Report*, European Commission, March 31, 2014.

EUROPEAN CENTRAL BANK, «Statistical Data Warehouse», http://sdw.ecb.europa.eu/

EUROSTAT, «Statistics», http://epp.eurostat.ec.europa.eu/

GERMAN FEDERAL STATISTICAL OFFICE, «Statistisches Bundesamt», *http://www.statistik-portal.de/*

GOODHART C. - ILLING G. (eds.), *Financial Crises, Contagion, and the Lender of Last Resort, a Reader*, Oxford University Press, 2002.

IMF, The Fund's Lending Framework and Sovereign Debt, May 22, 2014.

KRISHNAMURTHY A. - VISSING-JØRGENSEN A., «The Effects of Quantitative Easing on Interest Rates: Channels and Implications for Policy», *Brookings Papers on Economic Activity*, no. 43(2), 2011, pages 215-287.

MENICHELLI F., «Lo squilibrio strutturale della bilancia dei pagamenti e le sue conseguenze», *Interventi*, 2014, *http://www.nens.it*

MINENNA M., La moneta incompiuta, Ediesse, 2013.

MODY A. - BORNHORST F., «TARGET imbalances: Financing the Capital-Account Reversal in Europe», *VoxEU.org*, March 7, 2012.

PARELLO P.P. - VISCO V., «The European Redemption Fund: Comparison of Two Proposals», *Politica Economica: Rivista di Studi e Ricerche per la Politica Economica*, vol. 28, 2012, n. 3, pages 273-306.

of financial operators. At the present state, the risk of an uncontrolled increase of inflation dynamics seems low with respect to the possible benefits.

The Program outlined in this research would represent a further step to complete the Euro architecture and to make sustainable the economic policy provisions that currently are crumbling the idea of this European Union. In fact, by enabling the transition to a context which would be concretely compatible with the normalization of the macro-economic fundamentals, the EPDRP would allow the competent European and national institutions to deal with appropriate measures other key issues related to the membership to the common currency area and to the prevention of future excessive imbalances between the economies of the various member countries. Among these measures there is undoubtedly the adoption by individual national governments (in particular, those of peripheral countries) of the structural reforms required to remove their own idiosyncratic limits to growth. But the measures at stake should also regard with equal priority the adoption, at the level of all member countries, of agreements aimed at using the possibilities offered by the European Treaties to make more authentic the participation to the European Union. In fact, the goal of becoming a unitary economic reality in the global playing field cannot be achieved without the definition of mechanisms appointed to fiscal transfers between member countries, the banking union and, eventually, the mutualisation of the sovereign risks.

gennaio/marzo 2015

- PARIS P. WYPLOSZ C., «Politically Acceptable Debt Restructuring in the Eurozone», *Geneva Reports on the World Economy Special Report*, no. 3, 2013.
- SINN H.W., «Responsibility of States and Central Banks in the Euro Crisis», *CESifo*, vol. 15, no. 1, 2014.
- SINN H.W. WOLLMERSHÄUSER T., «Target Loans, Current Account Balances and Capital Flows: The ECB's Rescue Facility», *International Tax and Public Finance*, no. 19(4), 2012, pages 468-508.
- WINKLER A, (2014), "The ECB as Lender of Last Resort. Banks versus Governments", *LSE Financial Markets Group*, Special Paper Series, February