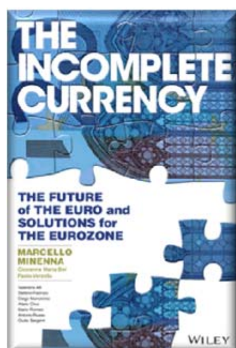

17th October 2017

Book Presentation: The Incomplete Currency

BY MARCELLO MINENNA

Many thanks for your invitation. It is an honour and a pleasure for me to give some insights from my analysis on the Euro architecture. I am quite critical with regard to the structure of the Eurozone, to the way how the Eurozone was born and to what in my opinion could be future of our currency area. For several reasons.

We will focus today on some of them, we will also give some background and I hope also to offer some perspective for our euro area by sharing with you also some possible proposals to revise its architecture.

So far – at least over the last 10 years – we have discussed only proposals coming, in a certain sense, from the German bureaucracy.

We are used to say they have decided to take the pen to write but the point is that nobody has decided to take the pen from them in order to try writing something different.

And my opinion is that in the most important moment in which the Euro-bureaucracy has to take some decisions, we were in front of some draft regulation and policy that actually could bring the Eurozone in the direction of a wider risk segregation and risk nationalization, instead of sharing risk within the euro area which actually should be something quite normal. If you share the currency you should share risks.

This orientation towards risk segregation is part of a strategy that has found in the German bureaucracy its father (and actually also the mother and the other relatives), and unfortunately has not been subject to a constructive debate within EU institutions. Even in recent times French President Macron – who during the electoral campaign has made of Eurobonds and risk sharing one of the important pillar of his political candidature – in a speech he gave at the Sorbonne after his election e has made it clear that he had abandoned the aim of revising the architecture in a risk-sharing direction.

And going back to the past, it was already in late 2010, at the famous Deauville meeting between Sarkozy and Merkel, that Euro-bureaucracy has veered in favour of risks segregation. This is relevant because financial markets and institutional investors don't attack a country or another country or a currency area. They just try to speculate by using information that they have. If politicians if politicians pass the message that the euro is just a fixed exchange rate regime, obviously markets bet on the divergence of sovereign yields. I want to remark this point because it is important to remember what kind of compromise the euro has been created on.

The euro was born on big compromise. For the sake of simplicity, today I will focus on Germany and Italy, as main representatives of the two sides of this compromise. In late '90s Italy had the problem of a large public debt and Germany that of competitiveness, also with respect to Italy. We were competing very well in terms of our current account with respect to Germany as well as in terms of our manufacturing system. But, even at that time, the level of our public debt and its cost were quite high and we had to manage this problem. So, by joining the euro, we would have got benefits from the Germanization of interest rates but the monetary union would have hurt the competitiveness of our manufacturing system because it would have altered the relationship between the Deutsche Mark and the Italian Lira. Indeed, if you look at the dynamics of the term structure of interest rates over the 6-8 years before the onset of the Eurozone, you will see a convergence to the German values, what in my book I dubbed *Germanization* of interest rates. This is an outcome of standard behaviours of financial agents, who performed what in literature now are known as "*convergence trades*". These are arbitrage strategies involving purchases and sales of Govies issued by different sovereigns in order to make profits from the expected convergence of their yields. This expectation was consistent with the forthcoming debut of the monetary union one currency has one term structure of interest rates. Interest rates are the cost of that good which is known as "money", and you cannot have different cos for the same good.

Obviously, investors bet on this. And also several EU directives and regulations on risks for banks, insurance companies and mutual funds pushed in this direction by assuming zero risk on Govies no matter what was their home country. So the signals given by politicians, regulators and Euro-bureaucracy agreed in nourishing the feeling that risks were shared, also in line with the principles of harmonic development and growth of the Euro area. And in fact financial agents made a lot of money from *convergence trades* and the *Germanization* of interest rates provided us with that reduction in the service cost of the public debt we were expecting. Actually, yields convergence also gave the government the chance to rearrange its bureaucracy and the room to fund public investments, but unfortunately at that times we have not been really efficient and our

investments have not proven be good. Rather we became champions of bad investments.

On the other hand we assisted to another phenomenon: the «*Italianization*» of exchange rates. For Germany, the entry into the euro has meant access to a weak currency, as shown by the trend in its real effective exchange rate and the consequent strong gain in competitiveness for its manufacturing system compared to the Italian one. This effect can be clearly appreciated by observing the trend of the current accounts of the two countries and the reversal of the respective positions of Italy and Germany.

However, at least until the crisis came, all this was somehow part of the gentlemen agreement on which the birth of the euro was based. We were aware that we would have obtained advantages on the side of public debt and lost points in terms of strength of our private sector. It was part of the game. And, likely, we were sure that, with internal reforms, the support of Eurozone institutions and with all other things that unfortunately did not happened, at a certain point the convergence of the economic cycles would have arrived creating a more homogeneous situation. But things went differently. In less than 3 years, financial markets started to bet on Eurozone dissolution and huge divergence trades took place, which we have perceived as market attacks. We had spent more or less 8-9 years to converge, and in less than 3 we assisted to divergence as financial operators realized that there was no Eurozone.

And despite the prudential regulation continued to assign zero risk to all Govies held by banks, insurances and asset management companies, soon the private sector involvement agreed at the Deauville meeting of late 2010 and materialised with the management of the Greek crisis proved that all future decisions of the Euro-bureaucracy would have been inspired to a new paradigm: risks' segregation. And let me immediately share with you that even today the problem of the spread, which is the great inconsistency of the common currency area for the reasons I said before, is not absolutely solved. If we compute the spread in real terms (i.e. net of inflation differentials), it is still very close to the average levels of 2011.

This has important implications in both the real and financial economy. economy and in the financial economy. On the real economy side, I use to refer to a variable that I call "*financial real effective exchange rate*": instead of correcting the exchange rate only by inflation, I also insert a correction for the spread of our sovereign yield with respect to Germany. And as you can see, this variable highlights something like a 40% gap in terms of competitiveness between Germany and Italy. It means something very simple: if we consider a standard good like this plastic glass sold to a US importer and produced both by a German and an Italian company, it's clear that the two products are perfect substitutes, but the US customer will prefer to buy the glass from the German company,

simply because it's cheaper. And the reason is that the Italian company will have to apply a 40% mark-up to the selling price exclusively due to the higher cost of money w.r.t. its German competitor. Obviously, in these conditions you cannot compete for a long time.

Not surprisingly the German current account boosted, reaching record values at a worldwide level in terms of GDP, while Italian industrial production collapsed. If we have two production factors, capital and work, and our cost capital surged due to the spread dynamics, this implies that we have to devalue work and cut investments. We know that Italy has lost a so huge quantity of public and private investments also because there are several problems of bureaucracy, legislation, slowness of the judicial system, corruption, etc. etc.. But definitively these are ancillary aspects of the big problem that is the incompleteness of the Eurozone's architecture with this abnormal phenomenon that is the spread.

On the side of financial economy we experienced the divergence of debt dynamics. Over the last five years, the Italian government has lost €100 billion of tax revenues because bankrupt companies do not pay taxes, banks record non-performing loans and get deferred tax credits. This means €100 billion of lower inflows for our public budget. What government could manage that? Especially if you face a vicious circle where you are asked to implement internal austerity because there are absurd rules (such as those of the Fiscal Compact) that do not discriminate between profitable investments and useless expenditures. It's a vicious loop: companies go bankrupt, they do not pay taxes, they lose bank loans because of the credit crunch, the banking system also faces problems, it needs to raise new fresh capital from investors/savers just when risks and losses are higher. Before the crisis the Italian households' wealth invested in financial assets was €4000 billion. Now it is worth more or less €3500 billion. So €500 billion of savings that 5 years ago were invested in financial instruments have been burnt.

And also if we look at the drivers of our 1.5% GDP growth: the larger component is given by debt-financed consumptions financed. Put it differently (simplifying a little bit): after 7 years of crisis, Italian people have to change the car because it is broken or they have got some temporary job with the Jobs Act and then they have eventually got access to credit and they can make some expenses. It is not a stable and structural growth like the 1,8% of Germany that is mainly composed by investments. So it is a huge difference. So it is not a surprise that the total Italian debt, public and private, exhibits such incredible growth. And if we look at the breakdown, we realize that Germany's overall leverage has risen by just 10% in 20 years, while that of Italy has grown by 60% over the same period.

The dynamics of the private sector debt actually are in the same direction. A country that does not like to make debt has moved exactly into the opposite direction and the other

way round for Germany as this picture shows very well. The impact of this? The explosion of non-performing loans, because obviously if we increase the private debt and these dynamics go out of control because there is a crisis of the internal demand and of the production capability, somebody will not be able to repay banks' loans. And obviously banks have to manage this situation.

With regard to the public debt, we have to recall that the government has lost a lot of money in terms of tax revenues and is also required to comply with austerity rules defined by Eurozone's institutions. So far all crisis management measures deployed by these institutions rely on risk segregation, and it is a very long list. Let me recap what happened since the outbreak of the crisis: the Securities Market Programme, the Long Term Refinancing Operations, the revision of the S&G Pact, the Fiscal Compact, the establishment of the European Stability Mechanism with the requirement to insert collective action clauses on Eurozone Govies; then the burden sharing and the bail-in provisions on the banking sector and (last but not least) the Quantitative Easing which is not risk shared and actually can be resembled to a synthetic CDS sold by the National Central Banks of the Eurozone members to the European Central Bank.

Just a few words on this list.

With the Securities Market Programme, the ECB has bought Govies of peripheral countries but – unlike the FED – it has cashed the coupons paid by these securities. Said differently: the ECB has been rewarded with the sovereign spreads of Southern Eurozone members. And since the NCBs participate in the Euro-system according to a capital key which is basically proportional to the GDP, it means that a large part of the money received by the ECB went to the Bundesbank. Some figures: thanks to the SMP the Bundesbank has received something like €3 billion, an authentic and paradoxical fiscal transfer from poorer peripheral regions to richer core countries occurred through the monetary policy. Later, between 2011 and 2012, with the 2 extraordinary Long Term Refinancing Operations, the ECB has lent to peripheral countries the money to repay their debts to Germany, allowing the latter to deleverage peripheral risk embedded on PIIGS Govies and commercial credit exposures. Italy received more or less €250 billion, of which about 1/5 have been used to repay commercial debts and 4/5 to buy BTPs that banks of core countries were selling off. Nothing of the LTROs liquidity went to real economy of the Eurozone's periphery.

Also the new fiscal rules adopted to tighten fiscal discipline within the EMU – namely the Six Pact and the Fiscal Compact – introduced new, heavy hurdles for peripheral countries. Public expenditure for profitable investments is included in the calculation of the structural budgetary balance which is required to be zero (only a negligible deficit being considered admissible). Thus, most indebted governments are forced to cut

spending on productive investments despite the well-known golden rule saying that these investments have high fiscal multipliers, well above 1.

A few months later, the European Stability Mechanism was established in the form of inter-governmental agreement of the Euro countries: despite having been baptized also as Eurozone sovereign bail-out fund, actually the ESM is a vehicle that so far has been involved in some (not structural) interventions to face some specific problems, such as the crisis of Spanish banks in the first half 2012, and the disbursement of loans and other forms of financial support to Greece and Cyprus. It is important to recall that (under German pressures) the Euro-bureaucracy used the ESM establishing treaty to impose model-CACs (collective action clauses) on Govies issued by member State from January 2013. As a consequence, almost all Govies refinanced every year (e.g. about €300 billion for Italy) must embed new clauses that facilitate public debt restructurings according to the modalities decided by the EU institutions and, at the same time, make it more difficult for a sovereign State to exit the euro with the aim of reducing its debt through the redenomination into a new, depreciated currency. So a loss of sovereignty on public debt by its issuing government.

On August 2013 the Communication on the banking sector introduced burden sharing provisions for the management of bank crises. Since then – well before the entry into force of the bail in rules on January 2016 – any intervention of a sovereign government to help a domestic bank has to get the prior green light of the European Commission, making it very hard to rescue troubled banks. Please observe the timing: new rules arrived just after that German government had disbursed €250 billion cash to bail out its banks plus other €250-300 billion in the form of public guarantees.

Even the ECB's Quantitative Easing participates into the list of measures adopted in compliance with the risk segregating approach, and it strongly supported the German mercantilist strategy on both the goods and the financial markets. Indeed, if you want to make a QE that injects liquidity to the real economy, you don't enact a program where National Central Banks borrow money from the ECB and are required to use it to directly purchase securities bearing the associated credit risk.

So: the LTROs had allowed the nationalization of public debts inside private banks balance sheets, while the QE has realized such nationalization inside the balance sheet of national central banks. The maximum common denominator of these measures is risk segregation: if one just consider the cash flows of the QE, he will immediately see that it is a huge sovereign CDS deal where NCBs are protection sellers and the ECB is the protection buyer.

The outcome of such monetary policies is that LTROs increased Italian banks' holdings of BTPs from €120 billion to more than €400 billion, and the reduction over the last three years simply mirrors the transfer of a large part of such stock of BTPs from private Italian banks to the Bank of Italy due to the Quantitative Easing. Despite the level of purchases designed in Frankfurt, the growth of BTP in the Bank of Italy balance sheet is linear apart from some oscillations due to time to time ECB's fine-tuning on the monthly rhythm of the purchases. And, in fact, if we make the breakdown by holding sector, we see that €95 billion of BTPs within the assets side of the balance sheet of the Bank of Italy come from the Italian banks.

The best way to summarize the implications of this systematic risk segregation are Target 2 balances. Target 2 is the European cross-border interbank settlement system. If an Italian bank settles a debt It has with a German bank, the Bundesbank writes a credit towards the Bank of Italy. If an Italian bank buys a BTP from a German bank you have a similar accounting record in the balance sheet of the Bundesbank and of the Bank of Italy: consequently, the Target 2 positive balance of the Bundesbank increases and the Target 2 negative balance of the Bank of Italy widens.

Look at this chart, the dark blue is the Germany, the red are peripheral countries. Let's focus on Italy in green. We experienced a widening of Target 2 deficit at the time of the LTROs, then our negative balance narrowed and, later, its growth has resumed with the QE. It is clear that any time risk segregation increases, Target 2 unbalances widen. A confirmation can be obtained by recombining Target 2 balances with the balance of payments of several Eurozone countries, because actually at a certain point in time they should be consistent with each other. And if you make this analysis, you will see that the two lines representing the balance of payments and the Target 2 balance respectively are almost perfectly overlapped. Then, moving to the decomposition of the balance of payment, we can identify the main contributors to historical trends. For instance, in the case of Italy, the larger components of the balance of payments are given by the purple line and the yellow one. The purple line represents the fact that the Italian investors move their money outside Italy, while the yellow one represents in a certain sense the fact that the inter-banking system does not give money to our banking system. The technical definition is *Italian banks' net borrowing on the interbank market*, which represents the money that the banking system within the Eurozone gives to the Italian banking sector, and obviously this is a proxy of the credit crunch for our industrial system, because our banks are discriminated due to the spread and thus the credit lines usually granted by the other banks within the Eurozone are closed and actually they display an increasing negative value over time.

But the interesting phenomenon is that, with the beginning of the Quantitative Easing, Italian investors began to bring their capitals abroad. A capital flight that represent the will of hedging against redenomination risk, against a possible restructuring of our public debt.

Not by chance, recent Germany's proposals on ESM reform include the replacement of collective action clauses with creditor participation clauses in order to achieve a larger control on the debt restructuring options available for Italy. German documents and reports on this topic are extraordinary readings! They do not directly speak about Italy, but rather refer to countries with huge public debt in GDP terms, well above the Maastricht threshold. I mean, they never explicitly say "Italy" but it's evident that their will to introduce creditor participation clauses in Eurozone Govies aims at providing automatic restructuring and at definitely excluding any room for debt redenomination in a new currency for highly indebted countries like Italy. We will discuss of these proposals later on.

But now, let's have a look at the recombination of balance of payments' components with the Target 2 balance for Germany. Here the picture is completely different with respect to Italy. The main component is represented by the current account balance: over years Germany has realized larger and larger surpluses which prove the big success of a mercantilist policy carried on with the support of the European institutions. First of all, the European Central Bank: all the extraordinary measures undertaken by the ECB since the outbreak of the crisis are the result of intense negotiation with the Bundesbank's representatives within the ECB' governing Council, which eventually explains which these measures did not bring money to the real economy but only served to support risk nationalization without real improvements of the Eurozone's resilience. We have just gained time. But, pay attention, we have gained time but without any further step into the right direction of sharing risks and supporting the convergence of the economic cycles across member countries. All these measures sent to financial players the clear message that even Eurozone members do not really believe in the future of the Eurozone itself, pushing market to bet on divergence and on spreads' widening.

Sooner or later the tapering will arrive. Maybe next week we could get the first signal with the announcement of a reduction in the monthly ECB's bond purchases, also because eligible Bunds are almost exhausted. Because this is another point. If you buy Govies according to the capital key but the stock of public debt is similar across different countries (German, French and Italian outstanding Govies are comparable), Bunds will finish before than OATs and BTPs, it is quite obvious. And it is incredible that despite this evidence the capital key is not under discussion. To deal with Bunds

scarcity, since January 2016 the ECB has introduced several exceptions for German Treasuries. They are the only Govies that can be bought without taking into consideration the ECB's deposit rate of ECB. Indeed, Bunds can be purchased even when their yields are more negative than the deposit rate. Conversely, no exceptions were introduced to accommodate for the most natural principle to be pursued if we believe in the Eurozone: risk sharing. The ECB should have bought more Govies from countries that have more problems, not the other way round. Instead, the Euro-bureaucracy continues to make proposals where risk reduction should be achieved at a national level by implementing pro-cyclical domestic reforms. We face a crisis on the demand side, but we deploy remedies that act on the supply side. It's like if (let me make this joke) I would have problem with my wife and I decide to discuss it with my father. You believe that I will fix my problem? Apart from some strange case, I think not.

So what is hidden under the carpet? And actually the carpet is quite transparent, hence it is something that we should be aware and this is the other thing that I was discussing half an hour ago with Giovanni. Under Germany's pressures the EU institutions are considering a package of proposals to reform the Eurozone. I bet that where these proposals will be adopted, everyone in Italy will seem absolutely surprised, despite – as member country – our representatives certainly sat at the decision tables, and they discussed these proposals, may be for one-two years, and may be they also agreed on them. Yet, any time it seems a big surprise.

First proposal: transformation of the European Stability Mechanism transformation into a European Monetary fund charged of the surveillance of the fiscal discipline by national governments. Let me make a sarcastic joke and somebody from the International Monetary Fund will forgive me: have you ever seen a country rescued by the IMF? Why, then, should an European Monetary Fund bail out any member country of our monetary union?

Second proposal: replacement of CACs with CPCs in order to introduce automatic debt restructuring but zero redenomination risk. A full loss of sovereignty.

Third: introduction of risk-weights on Govies. At the peak of the Eurozone sovereign debt crisis our banks were forced to absorb the huge excess of BTPs disposed by their French-German colleagues, and are now plenty of BTPs. This has created the notorious banks-State doom loop. And now that our banks held €400 billion of Italian Treasuries, Europe says: "*Come on they are not risk free. You need €50 billion of new fresh capital to hedge against your sovereign risk*". It's like to use your car to work and somebody comes to you and says: "*Give me your driving licence*". I use this car to work, it is part of my job.

Fourth: the ECB addendum on non-performing loans published a few weeks ago. It's fantastic! We have a problem of time, we need more time to manage the NPLs' stock of our banks, and the European banking surveillance says: "*By two years you have to get your money back, otherwise you have to sell your loans to a vulture company*". Apart from that there must be a reason if these are called "*vulture*" companies ... . And may be this reason is that they do not create value for banks but just for themselves. Anyway this is the proposal. And then, do you remember the third pillar of the Banking Union? The European deposit-insurance scheme? It is part of the agreement that has been implemented along with EU-wide surveillance and bail-in. Now Euro-bureaucracy is changing its mind, pretending that they will make a pan-European deposit-insurance scheme but it will be in the form of a system of loans and credits between member countries and, in any case, only after that each State will have solved by itself the NPLs' problem. Such proposals are just signals for big institutional investors that our bureaucracy does not believe in the Eurozone. The signal given to investment funds and financial markets is that it is better to bet on the spread, on the divergence of the members of the Euro area waiting for some future extraordinary measure by some EU agency that will reduce the spread letting them cashing an intermediation profit. Something I refer to as "*spread-based intermediation*". Some policy interventions become predictable and, consequently, investors make money from their anticipation.

I believe that it's time for Italy to make some proposals that would be consistent with the Treaties and also with market rules. We have to be part of the discussion. Think about this: we are a group of architects, we have to discuss a project to replace this very nice building where we are making this discussion. There is the German proposal to make a skyscraper of 200 floors. Why not? If we sit at the negotiating table without a proposal, what we can expect? To bring the skyscraper to 100 floors instead of 200. That is the maximum result we can achieve.

But if we sit at the table and explain that there are better alternatives to the skyscraper that are also in line with Eurozone rules, maybe we will get others' attention and engage a fruitful discussion on what would be the most suitable way to strengthen the resilience of our common currency area. The big problem is that so far we systematically joined those crucial European decision table without our proposals and, thus, we are forced to discuss only proposals of others who have very clear ideas. I just made you the recap of all the decisions that have been taken over the last ten years and I think I gave you the clear flavor that there is a political gap. We cannot always arrive late to discuss decisions that have already been taken, it does not make any sense.

Let's see these two proposals. The first one regards public debt. Why cannot we replace collective action clauses with some risk-sharing clauses? Every year we refinance a

relevant share of our public debt. Well: we could pay a premium to the ESM in order to receive an insurance. It is likely a credit default swap. We ask the ESM to grant this insurance, like an investment bank. Investment banks like to trade sovereign CDS. So we could pay the premium of our excess-risk over the weighted-average of the Eurozone. Obviously Germany would not pay any premium because it's less risky. But if Germany wants to share the currency and the related benefits, it has to let us pay money and after 10 years all the public debt of the Eurozone would be perfectly insured by the ESM. So we would have created a synthetic Eurozone public debt within the European Stability Mechanism. And then the ESM would comply with the mandate of rescuing member countries. I am required to early pay the market premium for my excess risk and, since every year I extend the ESM insurance to a wider part of my public debt, during the phase-in period there would be two public debt. For example for Italy, the first year we would have €350 billion of risk-shared debt and the risks of the remaining portion would not be shared. Obviously, over time, your risk would decrease and, consequently, the interest expenditure on your public debt would decrease too.

And then comes the second part of this proposal. Today the ESM operates with a leverage equal to 1: the loans and other financial support provided to beneficiary countries like Greece amount to about €80 billion which were disbursed by member countries by issuing new public debt which is not considered in the calculation of the 60% limit established by the Maastricht treaty. So we have issued public debt and we gave the proceeds to the ESM and this debt is outside Maastricht rules. We have created the first false accounting within the Eurozone. Apart from these things, I am saying that I do not like to create a false in the budgets of the Eurozone's countries. Thus, the money disbursed to the ESM should become part of the public debt relevant for the Maastricht rules. It is not a problem but the ESM should give back this money to the member countries in terms of investments. So far the Stability Mechanism has used its leverage capability to raise funds on the markets in order to give the resulting liquidity to some beneficiary country: to support Greek Govies' auctions, to aid Cyprus and to save Spanish banks in 2012. Conversely my idea is that with a unitary leverage the ESM could invest money in the country that has paid that a corresponding amount of sovereign CDS premium. So if I give you a CDS premium of €10 billion, you have to invest €10 billion in Italy. You have several options, you can issue growth bonds, you can give directly the money, you can make a lending facility in agreement with rules of the ESM.

Obviously I'm referring to productive investments. And for such a reason I would accept that decisions on the investment projects to be implemented are taken not by the Italian government but by a European institution, for instance the EU fiscal board created after the 5-Presidents' report of June 2015. And I also want also that they govern

the beauty contest and oversight all the stages of implementation of the new infrastructure. Because I want to be sure that you cannot say your domestic bureaucracy is not reliable. Do it from Brussels but definitively the money that you will receive as premium you have to reinvest in that country.

The result of this proposal is the following. You have a net benefit from the ESM reform in terms of investment (green line), the red line is the saving on the interest expenditure because obviously your credit converges towards the average Eurozone's level, so you eliminate the yield spreads between Govies and the Eurozone debt-to-GDP ratio would move from 90% to more or less 68% percent by 10 years. I have also sketched also the national debt-to-GDP ratio, but beware that with my proposal they become meaningless. Indeed, if national public debts are synthetically unified within the ESM and spreads across Govies no longer exist because we will have just one CDS premium for the Eurozone as a whole, it's clear that the debt-to-GDP ratio of individual countries does not make any sense. This quantitative analysis does not take into account the possible benefits associated with the fact financial institutions would start betting on sovereign yields' convergence. It is just the mathematical and statistical projection due to this convergence to a common CDS level within the Eurozone. And, in my opinion, for this reason it's a conservative estimate because I am quite sure that with a similar decision taken by the European Institutions financial markets would start betting again on convergence as it would become the right way to make money. And obviously – as you can see in this picture – the sovereign CDS premiums would go to the same level by a 10-year period.

Let's talk now about private debt and, then, I will finish my today's speech. We have to relaunch the real economy by aligning banks and companies balance sheets with the help of a public guarantee paid again at market prices. At this moment there is a big inconsistency between banks and companies' balance sheets. If a bank has a credit of €10 million that is non-performing and it also has already made provisions on it for, say, €8 million over 10, the net book value of that loan for the bank is €2 million. Not the same for the debtor company whose balance sheet still reports a €10 million liability due to the bank. This inconsistency also represents an advantage for vulture funds because they take over the credit for the nominal value of €10 million regardless the (true) net book value is just 2 million.

And I will tell you something more: more or less half of the gross value of our NPLs are interests. So it's not only the nominal value: when we speak about €300 billion of gross NPLs these are the original nominal original value plus interests. I believe that we have to change something in this weird accountability. And it's something that could be done with some national decisions. Actually, there are two law proposals in the Parliament

that unfortunately do not see the light because our Parliament is close to expire. But the point is that we have to synchronize this accountability: if the bank has written a €8 million loss on a €10 million credit, then the balance sheet of the debtor company has to be aligned with that of the bank by reporting a €2 million worth. I will explain you why with an example. Let's assume we have a company and a bank; there is a credit position of €10 million. The bank pays €4 million in taxes and the company €3 million: everything is fine, it's before the crisis. The government will cash €7 million of tax revenues. Crisis: the bank stops paying taxes because it writes a loss in its books, it classifies the loan as non-performing, it has to take into account the losses and, thus, it does not pay taxes. The company is in troubles and does not pay taxes too. So the government loses €7 million of tax revenues in this one period model. Then it arrives a vulture company that buys this credit, nominal 10, for 3 million. So the bank gains €1 million, and there is an incentive, and actually in our case there is also another incentive that comes from the regulation. So it's fantastic: the ECB/SSM – a subject that should set up the regulation in order to keep money within the Eurozone – insists to bring money outside, because vulture companies, very often, come from outside Eurozone borders. So, if the bank receives 3 million and the vulture fund squeezes the debtor company eventually bringing it to leave the market, what happens? That the value of this deal goes outside our boarders. Please notice that in this example the government has lost €7 million of tax revenues, the vulture company has extracted 1 million, so the losses were €8 million. Said differently: the collectivity has already suffered a 8 million loss. When I say that over the last 5 years – due to the bankruptcy of 40,000 businesses and to €300 billion of gross NPLs (more or less €100 billion, net of provisions) – the Italian government has lost €100 billion of tax revenues, it is because the collectivity has already borne the burden of the crisis. So, it's not a favor to banks or to companies if I just claim something like that: is this credit accounted for €2 million in the balance sheet of the bank? Well, the government provides a €2 million guarantee – paid at market value by the debtor company (it's peanuts) – and the company is allowed to update its balance sheet with a liability of just €2 million and to reset its position at the "*Centrale dei Rischi*" (the agency charged of keeping track of the bad debtors of Italian banks and managed by Bank of Italy) – as it was a performing borrower, hence recovering the possibility of acceding to new credit lines that it might need to reboot its business and regain competitiveness. According to several surveys conducted by Unimpresa and Confindustria there is plenty of small and medium companies that with just a few euros, could relaunch their business. And they cannot get that money because they are ranked as bad debtors at the "*Centrale dei Rischi*". By analyzing some public statistics I have estimated that the proposed measure could cover €100 billion of gross NPLs, which is about 1/3 of the overall stock; this means more or less €50 billion of net NPLs; with reasonable assumptions on the recovery value, the government would provide a

guarantee on about 40 billion with an average cost for the companies of just €5 billion. And obviously if the system reboots they will restart paying taxes. And then also the public balance sheet would gain and they could have some room for investments and to relaunch our production.

In my opinion it is important to focus the debate on the right subjects and, actually, this is why in year 2011 more or less I decided to move my research activity from the pure quantitative finance and the stochastic calculus applied to finance to this world, because I realized that there was a sort of gap analysis. The analysis on the allocation of risks was not fully present in this field, at least in my view. And so I decided to move and to try to look at these economic matters from the perspective of a researcher that knows how the financial world works and measures risks by using financial instruments like CDS or concepts like the basis arbitrage and so on. My feeling was that we weren't looking at the Eurozone's architecture through these lenses: I realized that the European institutions and the European bureaucracy were not moving in the right direction, they didn't understand that the spread is an abnormal phenomenon that must be concretely fought and that the famous "*whatever it takes*" of summer 2012 is not enough, maybe it's time for the ECB President to declare that the next target of the monetary policy is to achieve a zero spread in 2 years from now. Something that would give the clear feeling that Eurozone members are now ready to share risks. The original feature of my proposal for an ESM reform is that it doesn't break market rules, as it foresees that a country has to pay the fair price for the risk that it is insuring itself against.

Actually, I fear is that the Euro-bureaucracy is not ready for similar risk-based proposals and there have been several proofs of this. For example, think about the negotiations on GACs occurred 2 years ago: we have been the only country that has designed a tool by which the government can provide a bank with a guarantee on a bad loan but the cost for the bank is higher than the market price of such a guarantee. Because the rules behind are wrong. Well, if we do not fuel the debate on these risk-based interventions – and I really thank Giovanni for his kind invitation – I believe that (may be not in a short time because, remember, today it is not like in 1992 when we were joining a fixed exchange rate agreement without supporting institutions, while today we have a common central bank and a common currency) in the medium-long term we are going to face serious problems. I really fear that this worsening of our economy and the increasing divergence across Eurozone members could become chronic and very dangerous not only for the economic stability but may be also for the social stability of peripheral countries.

And with this thought I finish my speech and thank you for your kind attention.