30th SUERF Colloquium on

“States, Banks and the Financing of the Economy”

SUERF Marjolin Lecture

Money and Banking in Times of Crisis

Lorenzo Bini Smaghi

Weatherhead Center for International Affairs

Zürich– 5 September 2012

It's a great honor and pleasure to be here today to deliver the 2012 SUERF Marjolin Lecture.

Robert Marjolin was a great European and dedicated most of his life to the building of Europe. Looking at his professional life, in particular his writings, it does not appear that he – like many others - had clearly in mind how the United Europe would ultimately look like. He knew that Europe is – to some extent - a Journey, the main objective being that of bringing the people closer together, as is stated in the Rome Treaty. How we will get there, and how quickly, is much less clear, unfortunately.

This is the way Europe has been built. The Single Market was created in 1985 as a way to overcome the limits of the Common market and to extend its reach to services and labor markets. The Monetary Union was created with a view to overcome the limits of the Single market, and the inconsistency of having a multiplicity of currencies so as to ensure a level playing field. We are now discussing about a Banking union and a Fiscal Union as ways to overcome the limits of Monetary union in the face of asymmetric shocks and imperfect convergence. All these steps have entailed, and will entail, further political integration among the member states, into an entity which may be difficult to define ex ante.

This is not peculiar only to the European Union. After all the United States of America developed into an economic and political structure which was difficult to forecast at the very start. By merging the debt of the States Hamilton never imagined that this would bring later on to several defaults and banking crises which led to the adoption of budget rules by the various states, later to the creation of the Federal reserve, over 100 years after independence, and only in the mid-thirties to the structure of a federal economic Government similar to the one we know today. It took several defaults, banking crises, a civil war and a great depression to get to what seems today as the "end game" for the US; an end game which, incidentally, has not proven to be particularly efficient in dealing with the current crisis, the worse since WWII.

The work of Robert Marjolin is an inspiration for those who are currently working in the day-to-day construction of Europe, solving problems one after the other.

I would like to discuss today the conduct of monetary policy in times of crisis, as this seems to be a very topical issue. It is also an issue in which I have been deeply involved during my tenure at the ECB and that I have continued to follow in my academic experience over the last few months. I would like to focus on the euro area, which is currently facing a much more complex crisis than most other countries.

What characterizes the euro area crisis, from a monetary policy point of view, is that many of the key assumptions which underpin the decision making process of the central bank have fallen apart. In normal times, the central bank typically uses the main monetary policy instrument, typically the rate at which it refinances the banking system, with a view to achieve its objective which is primarily price stability. One objective and one instrument – as suggested by an optimal allocation of resources.

Underlying this policy framework are a series of assumptions that economists are used to make. Economists often forget that they have made such assumptions. Let me mention a few.

The first is a stable relationship between the key policy rate and the whole structure of interest rates prevailing in the financial markets, and in turn with the savings and investment decisions made by households and firms. Another, related assumption, is that markets are efficient and agents are rational, in anticipating monetary policy decisions and in pricing asset prices on the basis of their expectations. Another key assumption is that the economy disposes of a risk free asset that agent can hold a reference for their portfolio allocation decision.

The model that central banks use to calibrate their monetary policy decisions, with a view to attain their statutory objective, are based on several of these assumptions. Some of these assumptions do not hold any more in the euro area. Traditional monetary policy instruments cannot be used as expected in order to achieve central bank objectives. Something has to be done about it. The question is not only what should be done but who should do it and how. This is the current problem for the conduct of monetary policy in the euro area.

To be sure, the Treaty assigns to the ECB the task of defining and implementing the monetary policy of the union. This presumes that there is only a single monetary policy for the entire euro area.

This does not necessarily mean that monetary conditions are the same throughout the euro area, as the whole "one size fits all" debate has shown. It depends on whether economic conditions across the area differ and thus whether the single interest rate level decided by the central bank can lead to price stability in each and every part of the euro area. Given that such an event is highly unlikely, the ECB can target price stability only for the aggregate of the euro area, and cannot give too much importance to specific developments in the different corners of the area.

That was the assumption at the start of the union. It proved to be simplistic. Developments across the union need to be carefully monitored, and corrected if needed, because they may produce contagious effects on the rest of the union, especially after boom-and-bust cycles. Furthermore, the aggregate euro area data, calculated on the basis of a weighted mean of national data, may not necessarily represent an economically significant concept because of the wide dispersion across the regions of the union.

The current crisis has raised challenges for all central banks, leading them into uncharted waters. They have required rigorous analysis but also out-of-the-box thinking to address the new problems. For the ECB the challenges have been even greater, because the monetary union has turned out to function differently than expected, especially in crisis times.

I would like to focus today on two main issues which are currently distorting the way in which monetary policy is being implemented in the euro area. I will examine these distortions and try to assess what *can* be done to overcome the problem, what *has* been done and still *needs* to be done.

As can easily be imagined, as soon as we depart from the optimal frictionless and efficient market environment, there is no first best solution, but only trade-offs. Only second, or even third best solutions, are available. This means that the solution cannot be only in the hands of the central bank but requires some form of cooperation with the other policy authorities.

Such cooperation is not easy. In the euro area it is particularly complicated because the central bank has to deal with the authorities of 17 different countries, which are themselves accountable to their own citizens.

Let me focus on two of the main assumptions underlying the conduct of monetary policy which are currently not met in the euro area. I will consider the very short end and the long end of the yield curve, which are key components of the transmission mechanism of monetary policy.

Let's start with the very short end of the yield curve, the short term interbank money market rate. This is typically the operational target of the central bank. The short term rate at which banks exchange funds typically affects the yield curve, and thus the various rates at which banks lend to their customers and firms borrow in the international markets. Think for instance about the role that Euribor has on the indexation of mortgage rates. Changes in the short term interbank rate affect the whole yield curve, on the basis of expectations about future changes in the short term rates.

In normal times the central bank tries to influence the interbank money market by setting the rate of its regular refinancing operations. There is normally a one-to-one relationship between the two rates, which is determined by arbitrage operations conducted by the banks which refinance themselves with the central bank.

Two sorts of instabilities emerged during the crisis.

First, after the summer of 2007 the amount of central bank money requested by banks for precautionary reasons became unstable. Some banks, which were in danger of losing access to the money market, started to overbid at the regular weekly auctions. This forced the ECB to change the way in which it injected money in the system. In normal times, the central bank would estimate the liquidity deficit in the banking system, and auction on a weekly basis a given amount of central bank money. The banks would bid at a rate very close to the prevailing money market rate. With the increased instability in the demand for central bank money, due in particular to the greater precautionary holdings, the quantities auctioned turned out to be insufficient and rates increased, pushing market rates up. This move was sending a tightening signal to the market which was contrary to the intention of the central bank.

In the course of 2008 there were lengthy discussions on whether the tensions in the money market required some changes in the operational procedures of the central bank. One view was that the prevailing market turbulence had not affected the link between the various maturities and any instability would be transitory. Changing the operational procedures under such circumstances would have given a wrong signal. The alternative, of targeting the interbank money market more directly, as was done by other central banks, like the SNB for instance, was considered as too intrusive and taking away the incentive for market participants to restart a better functioning of the market.

This view – which turned out to be wrong – prevailed until the Fall of 2008.

After long discussions, the ECB decided to move to a system of fixed-rate-full-allotment tenders, as the crisis accelerated as a consequence of Lehman brothers' bankruptcy. Under the new system, which is still in place, the central bank sets the interest rate at which counterparties can apply for unlimited amounts of financing, as long as they have adequate collateral. The move to the new operational procedure aimed at reassuring banks that if they faced an unforeseen shortage of liquidity, they could refinance themselves at the central bank at a known rate and without any penalty nor stigma.

I said that it aimed at reassuring, because it really didn't. The reason is that the move to a FRFA mode was communicated as being temporary. Soon after the ECB introduced its non-standard measures it made clear that they were temporary and would be withdrawn at a certain point in time. This has been a typical central bank mantra. Up until July this year, the introductory statement to the Press conference which follows the Governing Council meeting repeats the mantra that *"all our non-standard monetary policy measures are temporary in nature"* (fortunately the sentence was dropped in August).

In fact, the discussion on the so-called exit-strategy started soon after the new – so-called" non-standard" - measures were introduced.

There were several reason for communicating the temporary nature of the non-standard measures. The first, already mentioned, was to encourage a restart of the normal functioning of the money market, by creating the right incentives for market participants. The second reason was the expectation that the tensions experienced in 2008-09 would be temporary and that the euro area could rapidly return to more normal conditions. The third reason was to avoid moral hazard, as the provision of unlimited liquidity would risk reducing the incentive for banks to adopt more fundamental measures, such as the strengthening of their solvency positions, which was one of the main reasons for the market malfunctioning.

With the benefit of hindsight, these concerns were probably overstated. Restarting the normal functioning of the money market is much more complicated than we thought. At that time, it was considered that one of the main obstacles was asymmetric information, related to the insufficient knowledge, and trust, in the solvency of counterparties. The ECB – and myself – advocated already in 2008 strong action by national authorities in order to recapitalize the banking system with rapid and decisive injections of capital across the board.[1] However, the process of bank recapitalization turned out to be too slow and based on a system of stress test which was inefficient and biased towards the worst performer. The crisis developed into new stages, as the economic downturn worsened the balance sheets of the banking system and of the public sector in a much more dramatic and interconnected way, as it became evident a few months later.

The unlimited provision of liquidity enabled the banking system to postpone addressing the solvency issue and took away the pressure from national supervisors to act more promptly. On the other hand, given the systemic nature of the crisis, the ECB could not have acted differently.

To be sure, had the ECB been given more powers in the supervisory field, it would have been able to force recapitalization of the weakest banks in a more effective way, along the lines followed by the Federal reserve, rather than relying on the good will of national authorities. The experience during the crisis proves that the lack of supervisory powers represents more of a disadvantage for the conduct of monetary policy, contrarily to what is often contended.

Insisting so much on the temporary nature of the non-standard measures might actually have been a mistake. It may have increased uncertainty among market participants and lead to overbidding behavior and rapid de-leveraging, which may have accelerated the credit crunch. To counter these fears the ECB finally decided to extend the maturity of the FRFA operations, first to 3 months, then six and further to one-year and more recently to three years. The longer the maturities of these operations, the greater the concerns about the possible distortions. However, the reminder that these operations are "by definition" temporary, is not credible any more.

[1] See Lorenzo Bini Smaghi, "Restarting a Market: The Case of the Interbank Market", *ECB Conference on Global Financial Linkages, transmission of Shocks and Asset Prices, Frankfurt, 1 December 2008 (*http://www.ecb.int/press/key/date/2008/html/sp081201.en.html)

A more credible message is that these measures will be implemented for as long as needed.

The second change which has occurred, more recently, is the re-nationalization of the money markets and the emergence of sovereign risk. There are currently very few cross border flows and the direction of these flows is opposite to the financing needs arising from the intra euro area current account balances. In other words, the banking systems of countries which need to refinance themselves, because of their net debtor position, are experiencing capital outflows, while those which have net creditor position are experiencing capital inflows. The money market is simply not working. The reason is the risk of convertibility. Depositors in debtor countries fear that their bank holdings might not be valued at par one day, and thus withdraw their accounts from domestic banks and deposit them with banks located in creditor countries.

The main reason for this capital outflow is the fear of sovereign default, which would in turn produce a default of the banking system and possibly the exit from the euro area.

The paradox is that banks in creditor countries are actually being discouraged from lending to banks in debtor countries, or to creditors located in these countries, including the sovereign. They are discouraged from lending to debtor countries not only because of the risk that I just mentioned but also because of the regulatory constraints that national supervisors are putting on their investment behavior. Regulators in some creditor countries – in particular Germany - are using the margins of discretion allowed by the European legislation to prevent banks from using their liquidity pools in creditor countries to finance their branches in debtor countries. In theory such practice is against the single market principle, but is apparently tolerated by the European authorities, including the European Commission and the EBA.

The matter of the fact is that in the current situation we don't have a single euro area financial market, even in the most liquid segment. This is partly due to the behavior of the national authorities which have reintroduced artificial barriers to capital mobility. Here again, if the ECB was given supervisory powers, it could eliminate such distortions.

As a result of the inefficiencies prevailing in the money market, the ECB has to step in and operate as the settlement agent, absorbing the liquidity from the banking system of the surplus countries and providing the liquidity to that of the deficit countries. The central bank is dis-intermediating the markets and its balance sheet has grown enormously as a consequence.

The main reason is that under the current state of uncertainty the only safe asset left is central bank money, which has a status comparable to banknotes. Banks' expectations that they can use their accounts with the Eurosystem to settle payments to their counterparts underpins the stability of the system. Without such a confidence the system would disintegrate.

In a fiat money system, the central bank cannot set limits to its willingness to convert bank liabilities into central bank money, to the extent that the banks are solvent. Any limit to banks' balances within the Eurosystem payment system (Target2 exposure), as suggested by some academics, would fuel bank runs and the disintegration of the euro area.

There is no justification for setting artificial limits to central banks' balance sheets. There is no evidence of any relationship between the size of central banks' balance sheets and inflation. Furthermore, the exposure of the central bank with the banking system throughout the euro area is fully collateralized and thus much safer for creditor countries than the direct exposure among the private sector.

In fact, a creditor country like Germany is much more protected by channeling its excess savings through the ECB and its payment system than by lending directly to the debtor countries. First, the a credit is collateralized, as I just mentioned. Second, any loss would be shared between the ECB's shareholders and Germany's share of the ECB's capital is much smaller than the share of the overall credit position in the Target2 exposures.

To sum up, there is currently no alternative for the ECB than providing unlimited funding to the banking system, and declaring that its stands ready to do so as long as needed. There is no point in continuously mentioning in public that this is a temporary measure, unless one really believes that we will be out of the woods soon. There is also no reason to raise the concerns about the potential risks for the central bank over the medium term. The ECB has all the instruments it needs to withdraw the liquidity at any point in time, if it wishes to do so in order to counter inflationary pressures. The moral hazard issue should be dealt with by providing more supervisory powers to the ECB. With such powers the ECB would foster faster and stronger recapitalization of the banking system in weaker countries and eliminate the artificial barriers to the single money market that some national supervisors have raised.

We also need more courage on the side of the European Commission, to fight attempts to re-nationalize markets and ensure a level playing field.

Let me now move to the other end of the yield curve, i.e. the medium to long term. Conditions at that end are strongly influenced by the Government bonds markets. Given the central role of Government bonds in the financial markets and the levels of spreads we are currently observing, we can state that there is currently no such a thing as a single monetary policy in the euro area. More seriously, the monetary conditions which prevail in some parts of the area are not consistent with the fiscal adjustment programs which have been negotiated and are being implemented. Any textbook analysis suggests that fiscal retrenchment can succeed if it is accompanied by an accommodative monetary policy. The monetary policy which is being currently implemented in the euro area, in the way in which it is transmitted to some of its parts, is not sufficiently accommodative, it is restrictive, and thus hampers the adjustment.

The key factor affecting the transmission of monetary policy is the market assessment of the credit risk and currency risk associated with investing in any of the periphery countries. If markets are considered to be efficient and rational, the current pricing should be considered as appropriate and in line with fundamentals. Nothing can reduce the current spreads between Government bond yields except changes in the fundamentals. If, on the contrary, markets are assumed not to be always rational and efficient, the current spreads are probably overestimating the currency and credit risk, as much as they were underestimating it between 1999 and 2008. As has been the case during several crises of the past, markets tend to finance imbalances for longer than expected, as long as the other market participants act accordingly, but once countries' access to financial markets starts being impaired financing becomes more difficult an may even stop suddenly. This is a typical situation in which multiple equilibria tend to arise. Under such circumstances an international institution is required to catalyze markets towards the good and sustainable equilibrium. Without such an intervention liquidity problems become solvency problems and the country's financial system may collapse.

This is probably the situation we are currently experiencing in the euro area. The prevailing spreads are out of line with market fundamentals and the risk of multiple equilibria exists as a result of uncertainties about how liquidity problems will be addressed in the euro area. The absence of a crisis management mechanism, with sufficient size and effectiveness, capable of deciding rapidly, is adding to this uncertainty.

The transmission mechanism of monetary policy is impaired if the central bank cannot affect the key market rates, including at the long end of the curve. As a result, monetary policy cannot contribute to the achievement of price stability.

The excessively high rates on the key asset, which affects the rate at which banks can borrow and thus lend to the real economy, determine an excessively restrictive monetary policy and hampers the success of the fiscal adjustment in some parts of the euro area. Symmetrically, monetary policy is – involuntarily - excessively expansionary in other parts of the area, as risk aversion determines very low – or even negative – interest rates, which create distortions in the financial system.

As I already mentioned, it was known from the start that monetary conditions could not be homogeneous throughout the area, because of the potential divergences in underlying economic fundamentals. These divergences should have been monitored more carefully. However, the divergences that we are currently experiencing have become so polarized as to make monetary policy ineffective and inappropriate for most of the Union.

The transmission mechanism of monetary policy needs to be fixed. But who’s task is it?

Central bankers tend to think that the responsibility lies primarily with national Governments and supervisors, given that the malfunctioning of the financial markets is mainly due to the heightened banking and sovereign risk. Governments, on their part, contend that they have already taken strong action, and have committed to more, but markets are too slow to recognize progress. If markets are too slow, the situation may become unsustainable. Only the central bank has sufficient firepower to push markets towards the sustainable equilibrium.

Both views are right, to some extent. But there can be no viable solution without actions being taken at the same time by Governments and by the central bank, each in their own field of competence. In allocating responsibilities, the euro area can build on the experience gained by the International Monetary Fund in dealing with crises for over 40 years. On the one hand, strong conditionality is needed to ensure that Governments consistently implement their adjustment programs over time. On the other hand, liquidity has to be provided in sufficiently large amounts so as to catalyze private financial flows and convince market participants that the system is stable.

To be effective, the solution requires confidence and trust between the policy authorities. The central bank has to be reassured that the conditionality adopted by the member states is sufficiently stringent, lasting and irreversible. In this respect, the experience which followed last Summer’s ECB’s intervention in the secondary market for Spanish and Italian Government debt has left a sour aftertaste. Furthermore, the experience in Greece, Ireland and Portugal has shown that Governments have been too late in asking for the conditional assistance of the European authorities and the IMF. The fear of losing sovereignty has given a political connotation to the adjustment program. The delay has led the private sector to withdraw completely from the markets once the official funds were made available. As a result, the financing required to support the adjustment program has increased enormously, compared with the past, and has not been able to play the traditional catalytic role for private funds.

Governments, on their side, want to be reassured that the tough measures that they have committed are supported by the provision of sufficient liquidity to guarantee success over time. To be sure, the fiscal adjustments which are currently being implemented have little chance of succeeding unless the interest rates prevailing in these countries are rapidly brought down more in line with the rest of the euro area. This can hardly be done without the direct involvement of the central bank.

The strategy is successful if market participants are convinced that policy makers stand ready to do all that is needed to solve the crisis. Communication is key, and needs to be consistent with this requirement. In this respect, focusing on what the central bank should *not* do or does *not* intend to do, rather than what it *might* eventually do, if necessary, in order to address the problem, can be counterproductive. For example, repeatedly raising concerns in the public about the size and the risks for the central bank balance sheet, about the dimension of the cross-border payment imbalances (Target2 balances) or about the limited ability of monetary policy to solve all problems can only fuel doubts among market participants about the determination of the monetary authorities. In a fiat money system, even the slightest doubt that the central bank may face constrains in ensuring the convertibility of the currency can fuel bank runs and generate financial turmoil.

The decisions recently announced by the ECB should contribute to reduce the stigma attached to an adjustment program. The ECB's readiness to intervene in the short end of the market to improve the transmission mechanism of monetary policy should reduce uncertainty and avoid the self-fulfilling destabilizing behavior of financial markets, once a country implements the agreed program. The large firepower available to the ECB should be sufficient to significantly reduce the risk of exit from the euro. Giving up the preferred creditor status should also help catalyze private sector flows and avoid that the country is totally cut off from the markets.

There is also an issue of political stigma to address.

One of the main reasons why the policy actions implemented in the Eurozone over the last two years have been ineffective in addressing the crisis is that the decisions were often taken too late. In particular, countries experiencing financial difficulties only requested support when market conditions had deteriorated to a point of no-return. The Greek Government, for instance, continued to deny that it needed the assistance of its European partners throughout the Spring of 2010, in spite of the rising tensions in financial markets. On 8 March 2010 – only six weeks before officially requesting the help of the IMF and the European union - George Papandreou, Greece's then Prime Minister, and Angela Merkel, the German Chancellor, standing side by side in a joint press conference stated respectively that "Greece doesn't *want* financial aid" and "Greece doesn't *need* financial aid".

Ireland and Portugal went through a similar state of denial, delaying the request for support until the interest rate on the respective Government bonds skyrocketed and access to financial markets vanished. The late application for financial assistance exacerbated market instability which spread to the other Eurozone countries.

The reluctance to request financial assistance from the IMF or the European union can be explained by the stigma which is attached to it. By asking for external support a Government implicitly recognizes its incapacity to act autonomously. It has to agree to the terms and conditions of an adjustment program designed by a supranational institution. It has to accept the monitoring of the implementation of the program by a group of “inspectors” (the Troika) regularly visiting the country. All these constraints represent a domestic political cost for the Government.

This is an issue which needs to be addressed. One way is to change parts of the procedure.

In the current system the request for financial assistance is made to the Eurogroup, which comprises the Finance ministers of the Eurozone. However, some national parliaments are sometimes given the “last say” and allowed to request additional conditions, giving the impression that some countries – rather than the European institutions - define the terms of the program. The experience of the Greek or Portuguese programs being suspended to the ratification votes of the German or Finnish Parliaments has fuelled tensions across countries and created the feeling that policies are “imposed” by foreigners. This should be avoided in the future, as ownership of the adjustment program is key for success. Finance ministers participating in the Eurogroup should discuss with their respective parliaments about the position they will take on specific cases ex ante rather than retrospectively. This is the way it works in the IMF, for instance, where there is no need for parliamentary ratification for each adjustment programme.

Furthermore, in order to reduce the political cost suffered Governments, implementing an adjustment program, the latter should be underwritten by the major parties of the country requesting assistance, not only those who form the prevailing majority, as was the case in Ireland, Portugal and Greece, with a view to ensure irreversibility in case of elections.

The request for EFSF/ESM assistance could be further de-politicized, and de-dramatized, by setting a threshold, in terms of bond spreads, beyond which the procedure would be triggered in a semi-automatic way. This would be analogous to the excessive deficit procedure, which also implies strict conditionality and monitoring and is launched as soon as deficits rise above the 3% threshold. After all, the spread between long term bonds (200 basis points) is – together with the 3% budget deficit - one of the Maastricht criteria for assessing the convergence of countries required for entering the euro. It could also be used to monitor convergence and to trigger procedures aimed at fostering adjustment within the euro.

If the survival of the euro requires further political integration – as many suggest – what is needed is not only that the member states share a greater number of decisions at the European level but also that they stand ready to accept greater interference by European institutions in policy areas which were previously considered to be the responsibility of national authorities. Politicians and opinion makers cannot ask for more Europe and then complain for the loss of sovereignty when Europe is needed and called to solve problems. The real issue is the democratic legitimacy and accountability of the European institution which is responsible for the relevant decisions in this policy area, i.e. the Eurogroup. Either the Eurogroup is considered legitimate, and accepted as such, or it should quickly be made legitimate by a rapid reform.

The euro area crisis may have reached a point in which it can hardly be resolved unless the policy authorities are determined to take bold actions. This may require that the member states further strengthen their policy commitments, concerning in particular the structural reforms aimed at improving competitiveness and growth, and make these commitments irreversible, consistently with their membership of the euro area. It also requires that the central bank takes drastic measures to ensure that there is a single monetary policy throughout the euro area, consistently with its mandate.

It’s no time for “games of chicken” between the various authorities, trying to push the other to move first. Too much is at stake. Cooperation must prevail.

Thank you for your attention.