THE EUROPEAN CENTRAL BANK'S RESPONSE TO THE CRISIS

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The great crisis of the 21st century has posed formidable challenges for economic policymakers throughout the world. The challenges have been particularly great for central banks, because of the importance of financial components in the genesis and development of the crisis, and because monetary policy is the most flexible, and, in the short-term, the most powerful economic policy instrument, although, as will be seen later, its ability to address certain types of shocks is limited. For the European Central Bank (ECB), things have been complicated by the fact that the crisis caught it at the start of the complex European monetary integration project, which, moreover, was based on institutional pillars that have proven to be insufficient in significant respects.

Challenges derived from the economic and financial crisis

Any analysis of the ECB's response to the crisis must begin by briefly identifying the challenges posed by the crisis for the advanced countries in general and for the euro area in particular.

After the subprime mortgage episode in the United States, the Great Recession imposed itself in the form of a sharp and sudden evaporation of world liquidity and an abrupt reassessment of financial risks as a result of the bankruptcy of Lehman Brothers, which threatened to destroy the stability of the global financial system. The financial crisis subsequently turned into a crisis of the economies' real sectors in the form of a deep recession, which, in some cases, such as the United States, posed a risk of deflation, and in others, such as the euro area, became highly persistent, with a prolonged double dip.

Apart from the conjunction of a major liquidity shock and a severe recession, the problems of using monetary policy to provide the required stimulus were further complicated by the limits on central bank action which arise when key interest rates approach zero.

Furthermore, the emergence of the marked financial imbalances which were at the root of the crisis made plain the significant shortcomings in economic policy. These shortcomings related mainly to the insufficient development of so-called macroprudential policy. Attending to and promoting macroprudential policy required the assumption of new responsibilities by central banks.[2]

Generally most of these problems do not differ substantially from those routinely addressed by monetary policy, although it is true that this time they were of a severity unseen in recent decades and obliged the authorities to make full use of the arsenal of tools available to them and to develop new ones suited to the exceptional situation. In the euro area, however, serious problems of financial fragmentation arose, which added a particularly serious and unprecedented dimension to the ECB's operational difficulties. These difficulties derived from the uniqueness of a single monetary policy which applies to 17 states

1 This article develops the address delivered at the conference "Experiencias y enseñanzas de las crisis económicas: Europa y América Latina", organised by the Universidad Complutense and Fundación Ramón Areces, on 16 July 2013 in Madrid.

2 Alberola, Trucharte and Vega (2013) review the Spanish experience of dynamic provisions and reflect on the role of central banks in preserving financial stability in the euro area.

that retain full sovereignty in the use of other economic policy instruments in the fiscal, structural and other areas, including those of regulation, supervision and, where applicable, the restructuring of their respective financial systems.

The fragmentation of euro area financial markets was also linked to the perception of the shortcomings of the institutional and governance framework in the original design of the Economic and Monetary Union (EMU) which reached the point of creating a risk of break-up or reversibility of the single currency. In fragmented financial markets, monetary policy stimuli do not pass through in equal measure to all member countries.[3] The deterioration of the transmission mechanism gave rise to very special complexities for the ECB.

The uniqueness of the European Central Bank

Obviously the ability of central banks to use monetary policy to address the challenges posed by a crisis like the one described will always be limited. The current crisis has structural components relating to the efficient allocation of resources and distributive components derived from income transfers between countries or sectors, against which monetary policy has no capacity to act. In fact monetary policy on its own, even deployed to its full extent, is unable to address the macroeconomic problems that come most specifically within its scope of action without support from other areas of economic policy, such as budgetary policy, particularly when there are problems of private-sector over-indebtedness and public-debt sustainability. It is well known that for monetary policy to be effective, even in the pursuit of price stability, it is essential to have sustainable public finances and therefore a regime of monetary dominance. In short, when the risk factors lie beyond its scope, monetary policy can merely buy time to allow other components of economic policy to act in the required direction and with the required force.

These limitations are especially severe in the case of the ECB which has no single interlocutor responsible for the other components of economic policy, but rather 17 sovereign states answerable to their national parliaments. This unique state of affairs is particularly important for interactions between monetary and fiscal policy. The particular design of EMU means that the ECB cannot, without the explicit acceptance of the national parliaments, undertake operations that may involve risk mutualisation or income transfers between member countries. The ECB may not interfere in inter-country income transfers, let alone make up for the lack of solidarity measures between Member States when national parliaments are not prepared to adopt such measures within the specific scope of their own powers. Transferring income between countries is not a function that can be assumed by a central bank, because it would come into conflict with the integrity and efficacy of monetary policy and with the democratic legitimacy required by the constitutions of the member countries and the Union treaties. The only risks that the ECB may assume are those that arise strictly from pursuit of the monetary policy objectives with which it has been entrusted.

Massive injections of liquidity

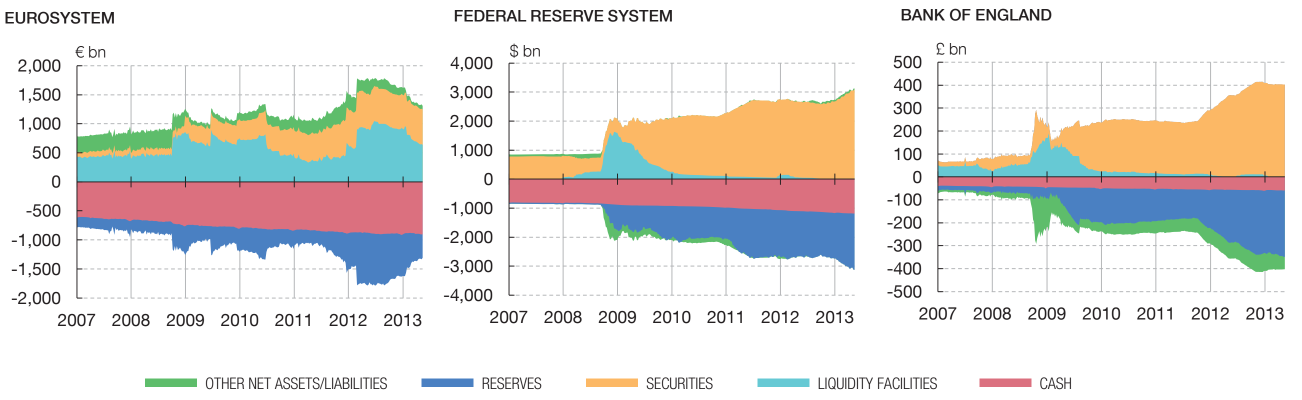
The ECB deserves recognition for having been the first central bank to respond to the sudden increase in risk aversion and the indiscriminate spread of distrust between financial intermediaries prompted by Lehman Brothers with massive injections of liquidity. Other central banks followed suit and the palliative effect was sufficient to prevent the wave of paralysis in the interbank market from leading to a general financial collapse (see Chart 1).[4] With its emergency liquidity-providing measures the ECB was able to make up for the

3 See Box 4.1 of the Annual Report of the Banco de España (2012).

4 A more detailed description of the actions of the ECB, the Federal Reserve System and the Bank of England between 2007 and 2009 may be found in Lenza, Pill and Reichlin (2010).

SIMPLIFIED BALANCE SHEET

CHART 1



SOURCES: ECB, Federal Reserve System and Bank of England.

practical disappearance of the interbank market by taking on the role of principal money market actor. As a result, a large proportion of the transactions previously entered into directly between financial intermediaries were moved onto the ECB's balance sheet. In very simple terms, institutions with surplus liquidity preferred to deposit it with the ECB rather than assuming risks vis-à-vis other counterparts, and the ECB, in turn, was practically the only remaining supplier of liquidity to institutions that needed it. The performance of this function led to a significant increase in the size of the central bank's balance sheet, which had to be expanded further as the development of the financial crisis closed off other means of financing for monetary financial institutions in the wholesale markets and when, as seen below, the euro crisis later led to the drying up of funding for some vulnerable euro area countries.

The operational design of the ECB was particularly well equipped to articulate this type of reaction. Other central banks had to modify their operational frameworks to make them more similar to that of the ECB, which dealt with a very large number of counterparts and accepted a very wide range of collateral. Yet, in attempting to ensure that its monetary policy stance reached the whole of the euro area economy, the ECB also had to innovate, modifying its tender procedures to enable fixed-rate tenders of unlimited amounts of liquidity to be conducted, widening the range of eligible collateral and easing the eligibility criteria, lengthening the maturities of monetary policy loans and designing new liquidity facilities to satisfy specific needs. Also, currency swaps were arranged with other central banks so that liquidity facilities could be offered in foreign currency.

Many of these innovations were introduced gradually in response to the needs that arose as the crisis spread and persisted. The easing of the collateral policy relieved the banks' liquidity constraints by offering them greater opportunities to mobilise assets whose markets had seized up and transform them into liquidity. Successive extensions to the period during which the ECB promised to maintain unlimited tenders and the lengthening of the maturities of liquidity providing loans, from three months to three years, helped to relieve uncertainty, by reassuring intermediaries that they could rely on central bank refinancing transactions for prolonged periods of time.

Purchases of securities, issued by both the private and public sectors, also played an important role in the expansion of the ECB's balance sheet. Two successive programmes to purchase covered bonds were launched and a further one for outright purchases of government bonds of countries under stress (SMP, Securities Market Programme), with the limited aim of re-establishing the transmission of monetary policy. Admittedly, when the composition of the expansion of the ECB's balance sheet is compared with that of the balance sheets of other central banks during the crisis (especially of the Federal Reserve System, the Bank of England and the Bank of Japan), the most notable difference is the lower relative weight of securities purchases, especially of government securities, compared with the much more important role of lending to credit institutions (see Chart 1). This is an important difference, which is related to the initial features of the operational frameworks, but above all to the ECB's unique status, mentioned above, as the central bank of 17 countries.

Monetary expansion and the zero interest rate bound

Non-standard measures to satisfy the increased preference for liquidity and to facilitate the transmission of the monetary policy stance to agents' final spending decisions were introduced in parallel with an easing of monetary conditions, given the weakness of demand and activity in the area and the anchoring of inflation expectations in line with the ECB's price stability mandate (see Chart 2). The extraordinarily expansionary monetary policy stance eventually adopted was intended to create conditions more conducive to sustaining the momentum of private investment and consumption expenditure and to assisting many agents with their ongoing deleveraging. However, the required monetary easing ran into two major problems. First, the limit on the margin for manoeuvre, which arises when key interest rates approach zero and, second, the breakdown of monetary policy transmission as a consequence of the area's financial fragmentation.

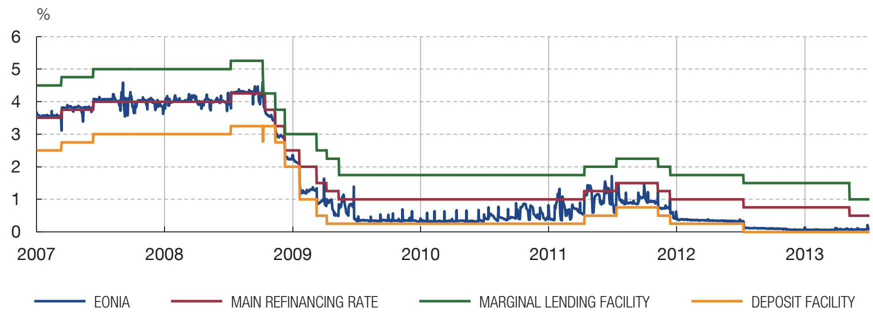
When monetary policy loan tenders are conducted at fixed rates and for unlimited amounts, as has been the case since the start of the crisis, the reference for monetary policy transmission is established by the lower part of the corridor defined by the ECB's deposit and credit facilities, i.e. the part between the deposit facility and the rate on the ECB's refinancing operations. Since July 2012, the deposit facility rate has been standing at zero, while the main refinancing rate was reduced to 1% on 8 December 2011, to 0.75% on 5 July 2012 and to 0.5% on 2 May 2013. To avoid a negative deposit facility rate and to keep the corridor symmetric around the main refinancing operations rate, the marginal lending facility rates have been moving in such a way that the width of the corridor has been narrowing. With these movements in conventional instruments, the ECB has, like other central banks, approached the so-called zero lower bound. The absence of deflationary risks in the euro area and differences in the timing of the cycle, which meant that the area initially faced the crisis with higher rates, explain why in the euro area the approach to the limit has taken place later. Apart from these circumstantial differences, it is worth examining the different operational modalities with which the various areas have addressed this constraint and the reasons underlying them. Basically three instruments are identified in the literature for dealing with this anomalous situation: negative interest rates, forward guidance and quantitative easing, considering both the expansion and the change in the composition of the central bank's balance sheet.[5] We shall now consider the specific details of the ECB's recourse to these instruments.[6]

5 Bernanke and Reinhart (2004) outlined these monetary policy options in response to the debate at the beginning of the century regarding the Japanese problems and deflationary fears in the United States. In the same context, Eggertsson y Woodford (2003, 2004) developed a theoretical justification for the crucial role that expectations regarding the conduct of monetary policy may play when the official interest rate is close to zero. In the current context, Woodford (2012) reviews the available theoretical arguments and the conditions under which one might expect greater effectiveness of these non-conventional dimensions of monetary policy.

6 A comparative description of the non-conventional measures deployed by the central banks of the developed countries in order to restore the financial system's intermediation function and stimulate the economy may be consulted in IMF (2013).

EONIA AND ECB INTEREST RATES

CHART 2



SOURCE: ECB.

There is limited scope for recourse to negative interest rates and they may introduce some distortions into the functioning of the money markets, so they have been used on very rare occasions and with inconclusive results. That said, they may send a powerful signal regarding monetary policy intentions and, in the case of the euro area, they could help to rebalance the incentives between institutions or areas with excess liquidity and those suffering a shortfall. For this reason, the ECB has carried out the preparatory work necessary to be able to set negative deposit facility rates and has announced that it remains open to their possible implementation if the situation so requires. Thus, recourse to negative interest rates can be said to be part of the ECB's arsenal of instruments.

Recourse to forward guidance on the behaviour of short-term interest rates seeks to directly impact the formation of expectations and, therefore, the slope of the yield curve, lowering long-term interest rates so as to generate incentives to spend or acquire risky assets. The Federal Reserve System is the central bank that has taken this strategy furthest, starting with general messages that key rates would be kept close to zero for as long as necessary, it later linked this period to certain quantitative references relating to the behaviour of unemployment. This step is, doubtless, linked to the uniqueness of the Fed's dual mandate, in which price stability and the fight against unemployment are explicitly mentioned. In the case of the ECB, recourse to this option has resulted in important innovations in communication. From repeating the message that it was reluctant to make any prior commitments, the ECB switched to stressing that its monetary policy would remain expansionary for as long as necessary. Then, at the meeting of 4 July 2013 an explicit forward guidance formula was adopted, by adding that the Governing Council expected that key ECB interest rates would remain at present or lower levels for an extended period of time.[7] This is, therefore, one of the instruments that the ECB is using.

Where the differences are most notable is in relation to quantitative easing, which consists of large-scale purchases of bonds – primarily government bonds – on the secondary market in order to impact the interest rates on these instruments directly and, thus, the slope of the yield curve. Quantitative easing has been the main factor driving the expansion of the balance sheets of the Federal Reserve System and of the Bank of England, as seen in Chart 1.[8] The most aggressive version of this type of action has been that recently adopted by the Bank of Japan, given the magnitude of the purchase programmes announced with the explicit intention of increasing the rate of inflation. As

7 The rationale for the Governing Council's decision to provide forward guidance on the key ECB interest rates is explained in the box of the editorial of the ECB's Monthly Bulletin of July 2013.

8 See Cúrdia and Woodford (2011) for an exposition and theoretical justification of the effectiveness of this type of measure.

mentioned above, the ECB has implemented several securities purchase programmes (SMPs) which include, in moderate amounts and subject to strict conditions, outright secondary market purchases of the government bonds of certain Member States. However, the motivation for recourse to this mode of operation is not – nor could it be – a general reduction in the long-term cost of financing for the public sector. The ECB's unique status as the central bank of 17 sovereign countries prevents it from undertaking quantitative easing operations like those implemented by other central banks, because they would involve directly assuming the mutualisation of risks and the possibility of making income transfers between such countries, without the acceptance or approval of their respective parliaments. The purpose of possible government bond purchases in the secondary market by the ECB can only relate to the specific euro area problem of possible financial fragmentation and the distortion that this introduces into monetary policy transmission.[9]

Fragmentation of the euro area and breakdown of the transmission mechanism of the single monetary policy

Two specific problems the ECB has had to address, of enormous significance, are financial fragmentation and doubts regarding the sustainability of monetary integration.[10] These problems have had a decisive influence over the entire economic policy of the euro area, and very particularly its monetary policy (see Chart 3). Many of the non-standard measures adopted to meet the huge liquidity needs have also had as a central concern recovery of lost integration and minimising the risk of a euro break-up. The heightening of tensions in summer 2012 forced the ECB to announce the launch of exceptional mechanisms to escape the vicious circle of expectations of possible euro break-up that risked becoming self-fulfilling. This was the reason for the announcement (and design and preparation) of the outright monetary transactions (OMT) programme.

Fundamental to understanding the specific role and limited capacity of the non-standard operations undertaken by the ECB in order to overcome the financial fragmentation of the area is a diagnosis of the euro area crisis.[11] In short, the crisis has two roots. First, in many countries economic policy-makers did not adopt the policies to ensure macroeconomic stability that belonging to the euro area necessitated; and the financial markets, in turn, failed to penalise the mistaken policies and to exercise the disciplinary function that is expected from them. Thus, significant imbalances built up and suddenly came to light when the economic crisis put a stop to the exuberant growth that had until then helped to hide the underlying problems.

Second, the crisis has been the result of a set of weaknesses inherent in the initial institutional design of the Monetary Union. This design included a single monetary policy, accompanied by coordination and mutual vigilance in other areas of economic policy that was much more diffuse and barely effective. The most notorious example, in the area of budgetary stability, was the almost complete unworkability of the Stability and Growth Pact. The instruments established to coordinate other structural, regulatory or financial policies were even weaker. And all this was compounded by the total absence of appropriate mechanisms to manage systemic crises affecting the area as a whole, so that when tensions mounted it was not possible to act sufficiently rapidly. The Economic and Monetary Union was indeed a monetary union, but hardly an economic one.

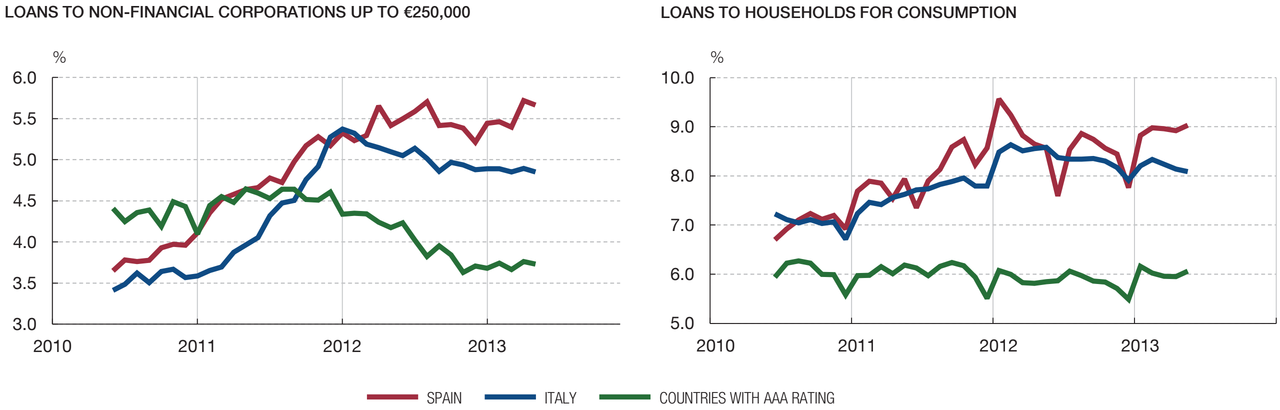
9 Millaruelo and del Río (2013) and Cour-Thimann and Winkler (2013) review the ECB's non-conventional measures during the different phases of the crisis and their links to the institutional framework of the euro area and the characteristics of its financial system.

10 A broad compilation and analysis of the most important indicators of financial integration in the euro area can be found in the ECB's report on financial integration. See ECB (2012 and 2013).

11 For further details see Chapter 2 of the *Annual Report,* Banco de España (2012).

BANK INTEREST RATES

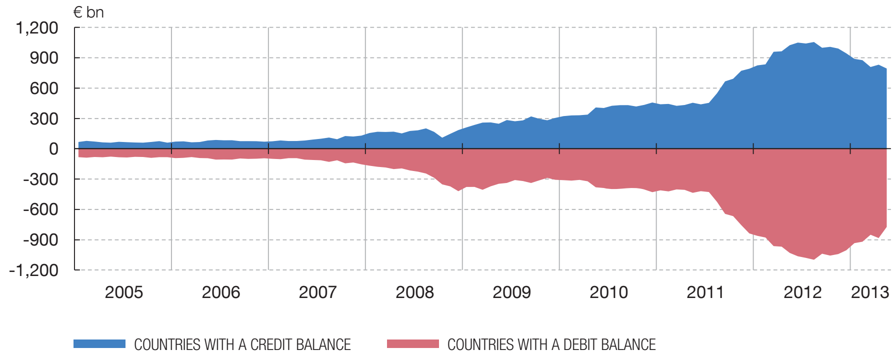
CHART 3



SOURCE: ECB.

AGGREGATED TARGET2 BALANCES OF THE EUROSYSTEM NATIONAL CENTRAL BANKS

CHART 4



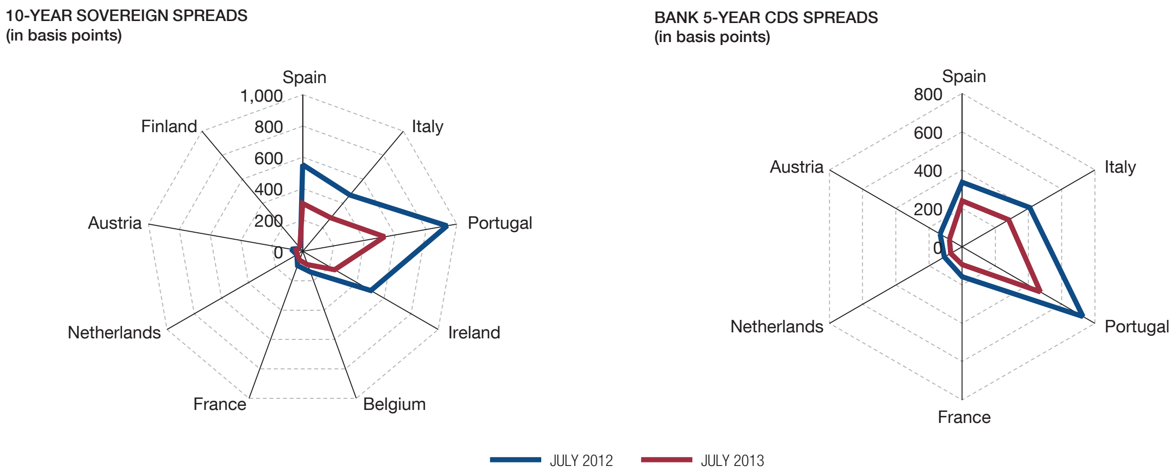
SOURCES: ECB and National Central Banks.

The size of the imbalances that built up, and then erupted during the crisis, is sufficient in itself to indicate the gravity of EMU's design failures. One of the most serious consequences was the creation of a vicious circle between the deterioration in the macroeconomic outlook, financial risks and sovereign debt risks, which fuelled each other and spread from one vulnerable country to another, with very little scope for the European authorities to react. The point was reached where this negative feedback loop led some analysts to question the very survival of the euro, at least in its current configuration and with its current borders. The prospects that the debts of some governments and some companies situated in these countries could not be settled in euro had gained traction. Some international investors began to sell the sovereign bonds of certain peripheral countries or the securities issued by private institutions domiciled in them. Germany became the safe haven and attracted flows of funds, which widened the interest rate spreads and reduced the availability of credit, increasing its cost, thereby deepening the financial cracks in the area. The developments in the Target balances of the Eurosystem central banks became the most visible evidence of this fragmentation (see Chart 4).

This dangerous feedback loop was halted by action on three fronts. First, the national governments most directly affected by confidence and credibility problems stepped up their economic adjustment processes and structural reform programmes. For example, the approval by the Troika of the progress made in Greece to comply with its programme

SPREADS OVER GERMANY

CHART 5



SOURCES: ECB, Datastream and Banco de España.

clearly helped to ease market tensions. A second front on which action was necessary to overcome the euro crisis was in the specific area of monetary policy. While monetary policy clearly does not have the capacity or the authority to resolve the fundamental problems underlying the crisis, it is also clear that the ECB's passivity in the face of the gravity of the expectations being generated and the extent of the breakdown in transmission of the single monetary policy would have precipitated catastrophe. In these circumstances, the activation of extraordinary measures confirming the ECB's commitment to preserving the single currency and to restoring monetary transmission was essential to achieving its objective of monetary stability. The scope of the challenges faced justified an extension of the menu of non-standard monetary policy operations to include the OMT programme, which envisages the possibility of purchasing the sovereign bonds of countries subject to unfounded expectations that they will abandon the euro.

OMTs cannot be compared to specific quantitative easing instruments. Rather, their purpose is to combat the tail risk of an eventual euro break-up and of blockage in the transmission of monetary policy to the peripheral countries. In line with this view, OMTs are subject to strong conditionality, so they cannot be understood as a replacement for the reform drive needed in countries with imbalances. As shown by numerous financial indicators and as is generally acknowledged by analysts, the mere announcement of OMTs has been very effective in achieving their objective (see Chart 5).

In any case, a lasting solution for the problems that emerged depends to a great extent on action on the third front, namely the measures the European authorities need to take to reform and strengthen euro governance and to facilitate the path from an exclusively monetary union towards a more genuine economic union, according to the route map approved by the European Council. These involve a banking union, an economic union, a fiscal union and a strengthening of the democratic legitimacy of the whole process, which may be understood as a kind of political union.

The banking union

As regards action by the ECB, the steps needed to establish a banking union are especially important. This is because such a union would have a very direct impact on the fragmentation problems and break-up risks that have distorted monetary policy transmission. Moreover, the ECB itself has been assigned the role of single supervisor, and this role

– along with the establishment of a single resolution mechanism and the harmonisation of deposit guarantee systems – is one of the fundamental ingredients of a banking union. In principle, EMU's special architecture did not provide for the attribution of banking supervision functions to the ECB, despite the fact that they are a central bank responsibility in many countries. Yet, reasons of urgency and the difficulty of reforming the treaties to establish appropriate provisions for setting up a European single supervisory institution from scratch meant that the best way forward was to use the leeway offered by the current treaties to build upon the one European institution with the capacity and independence to perform this function, by broadly interpreting the functions that the European Council was authorised to assign to the ECB.

Rapid progress towards a banking union – one of the most important decisions taken by the European authorities to strengthen EMU in order to sever the negative feedback loop of summer 2012 – was an unavoidable response to some of the serious malfunctions besetting the euro. A banking union is required to break the vicious circle between banking risk and sovereign risk and to achieve the degree of financial integration appropriate for the existence of a currency, so that the banks of the area are on an equal footing to compete for capital and funds, on the basis of their solvency and business model alone, irrespective of the country in which they are domiciled. These are essential conditions to ensure that an appropriate transmission of monetary policy permits its stimuli to reach all member countries alike, although that is not to say that interest rates would have to be as uniform as they were during the period in which the serious imbalances that ended in crisis built up.

We are all aware of the enormous complexity of the project embarked upon, but nobody should ignore just how much is at stake for Europe and its integration process.

28.6.2013.

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