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EUROSYSTEM

"The role of the ECB in financial crisis management"

Speech by

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I. Introduction

"*Τα πάντα ρεῖ*" (all is in flux) Heraclitus asserted about 2500 years ago. His aphorism is truly relevant to our understanding and assessment of the financial and economic developments over the past two years. The financial crisis has evolved over time, and so have the policies employed to counteract its impact as well as the public debate about its causes and consequences. A year ago, gatherings such as this one would have been dedicated to identifying the underlying sources and the other contributing factors of the turmoil in financial markets. Six months ago, as the crisis deepened and broadened after the collapse of Lehman Brothers, public policies and discussions concentrated on how to restore confidence in the banking system and deal with the significant weakening of economic activity worldwide. More recently, the attention has progressively focused on the new economic and financial landscape that is likely to emerge after the crisis, and on devising "exit strategies" from the extraordinary policies currently pursued. This conference is at the heart of the present phase of the evolving debate and I would like to thank the Bank of Greece and the Hellenic Observatory at the London School of Economics and Political Science for inviting me to contribute to this discussion.

The general theme of this conference highlights the cost of the financial crisis, the policies being implemented to manage and resolve it, and the plans for an exit strategy. The financial, economic and social costs are indeed staggering, and they are likely to rise. A few figures will underscore the magnitude of the costs incurred so far. With regard to *financial* costs, the total writedowns on the assets of global banks over the period 2007-2010 have been estimated by the IMF at USD 2.8 trillion of which about one-third, just under USD 1 trillion, have already occurred.[1] In the euro area, the writedowns of banks reported so far, until early May, had reached USD 179 billion, roughly 18% of the total losses incurred by banks globally to date. The value of net *wealth* has also declined substantially since the turmoil erupted. For example, the market value of equity in Europe had fallen by EUR 3.65 trillion, or 45%, from its previous

[1] The total potential writedowns on the assets of global financial institutions (including banks pension funds, insurance companies and hedge funds) over the period 2007-2010 have been estimated at USD 4.1 trillion, of which about two thirds (USD 2.8 trillion) are expected to be borne by banks (see International Monetary Fund (2009)). These estimates, which include future potential writedowns until the end of 2010, are based on a number of projections of future economic activity and assumptions about asset market developments, and estimates of the likely impairment charges on loans. They are, therefore, subject to a substantial margin of error.

peak in July 2007 until late May 2009. [2] Finally, with regard to the *economic* cost of the crisis, one simple but encompassing measure is the aggregate output lost due to the recession that was triggered by the financial turmoil. In the euro area, the cumulated output loss from the second quarter of 2008 (when growth turned negative) until the first quarter of this year, amounts to 5% of GDP, which is equivalent to about EUR 400 billion. [3]

In order to mitigate the effects of the crisis on the financial sector and the real economy, governments and central banks have taken strong and decisive action. Indeed, in many cases they have implemented measures that are extraordinary in size and scope. As a central banker, I will concentrate in my remarks on the role of central banks – and of the ECB in particular – in dealing with the current financial crisis and establishing conditions that support the economy's recovery and return to a path of sustainable growth and price stability. In particular, I will address the following issues:

- *first,* the available central bank policy instruments in managing a financial crisis and the rationale for the measures actually taken;
- *second*, the effectiveness of the ECB's policies in promoting the orderly functioning of money markets, in fostering the provision of credit to firms and households, and, more generally, in countering the effects of the crisis on the financial system and the broader economy;
- *third*, the role and effectiveness of other policies – notably the government measures to support the banking system and the fiscal stimulus packages – in mitigating the impact of the crisis and in complementing the actions of central banks; and
- *fourth*, and looking forward, the prospects for sustainable growth in an environment of price stability and financial stability; that is, the prospects of escaping from the current state of economic underperformance and financial system stress, and the associated need for an appropriate exit strategy from the extraordinary measures taken by central banks and governments.

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[2] Figures based on S&P European 350 Index. It should be noted, however, that this index has recovered significantly since March 2009; market capitalisation rose from €3.39 trillion on 9 March to €4.55 trillion by 26 May 2009.

[3] This figure measures the estimated foregone aggregate output compared to a counterfactual non-crisis scenario under which euro area GDP would have expanded at an average rate equal to its long term growth potential.

II. Financial crisis management: the role and instruments of central bank policy

Let me start by making two general points concerning the role of central banks in safeguarding financial stability and the instruments that can be employed to this end. The first point is that the role and actions of central banks, in promoting financial stability must be compatible with the policy framework guiding the achievement of the primary objective of price stability. Financial stability and price stability are, in general, complementary goals and conditions that are mutually reinforcing. But there can be occasions when the constellation of shocks affecting the economy and the dynamics of market processes may pose challenges or policy trade-offs for central banks aiming at the preservation of price and the safeguarding of financial stability.

The second point concerns the available policy instruments and the actual measures taken by central banks when dealing with the financial crisis: The tools include *(i)* liquidity provision and management; *(ii)* the key monetary policy interest rates; and *(iii)* credit support measures aimed at enhancing the functioning of credit markets. The use of these policy instruments, and the timing of their use, depend on the potential relationship between *(i)* the prospects for price stability and *(ii)* the size of financial market stresses and associated systemic risks. It also depends upon the economy's financial structure. For example, the extent to which the financing of the economy relies on the banking system and on the capital market has implications for the relative reliance on different policy tools.

These propositions are useful in order to better understand the rationale and the nature of the policies that have been pursued by the ECB in managing the current crisis. In particular, when assessing the role of the ECB in supporting financial stability, it is important to distinguish between actions that involve a change in the monetary policy stance – that is, a change in the policy rate and/or an expansion of central bank money – and the management of liquidity that aims to mitigate the impact of shocks on the interbank money market so as to ensure its orderly functioning and the efficient transmission of monetary policy impulses to the economy.

Since the financial turbulence erupted in summer 2007, financial and economic developments as well as central bank policy responses can be usefully examined and assessed over two time periods. During the first period, from early August 2007 until early October 2008, the ECB did not ease the stance of monetary policy – as defined by its key policy rates – to address financial market tensions. On the contrary, in July 2008, it raised its key policy rates by 25 basis points to counter increasing inflationary pressures and medium-term inflation risks. But from the onset of the crisis in August 2007, the ECB took swift and decisive action to provide liquidity in the interbank money market in order to alleviate the stresses and ensure, to the maximum extent possible, that liquidity problems would not turn into solvency problems, and that systemic risk would be effectively contained.

During this first phase of the crisis, the Eurosystem engaged in active liquidity management adjusting the intertemporal distribution of liquidity provision within the reserve maintenance period, but without changing the total supply of bank reserves over the entire maintenance period. At the same time, the maturity profile of the refinancing operations was altered, but the overall supply of central bank money was kept broadly unchanged. As a result, between the end of June 2007 and the end of September 2008, the balance sheet of the Eurosystem increased only moderately by about 100 billion euro.[4]

Therefore, for more than a year since the eruption of the financial market turmoil, the unfavourable combination of, on the one hand, persisting and increasing inflation risks and, on the other, substantial stresses in the financial systems and risks to its stability required a "separation" of the monetary policy stance from the management of liquidity. The former was defined so as to achieve the primary objective of preserving medium-term price stability. The latter aimed at, and was effective in, mitigating pressures in the money market and tensions in other financial markets, as measured, for example, by CDS spreads and corporate bond risk premia, which gradually eased.

With the collapse of Lehman Brothers in September last year, the crisis entered a new phase: it intensified greatly and abruptly, spread across economic sectors, and broadened globally. Risk aversion rose dramatically and confidence plummeted, stresses in the banking system increased, the money market became dysfunctional, and world economic activity weakened substantially accompanied by a sharp drop in world trade and a marked decline in commodity prices.

The sudden and substantial deterioration in financial market conditions and the macroeconomic environment changed the outlook for price stability and inflation risks diminished significantly in the euro area and globally. At the same time, the risks to financial stability increased. In response, the ECB and other major central banks eased monetary policy and injected large amounts of liquidity, also employing non-standard policy measures. Over the past seven months, since the financial crisis deepened and broadened, the ECB has reduced its key policy interest rate by 325 basis point, to now 1%. The magnitude of the monetary policy easing over such a short period of time is unprecedented.

Indeed, the provision of liquidity by the ECB to the euro area banking system has been extraordinary in size and scope, and has involved implementation of non-standard measures. Following the Lehman Brothers bankruptcy last September, banks became ever more reluctant to lend to each other as a result of a sharp increase in the perceived risks of counterparty default and a continued lack of transparency about the health of banks' balance sheets.[5] Since last October, the ECB has provided unlimited funding in euro at fixed interest rates over periods up to six months against an expanded list of eligible assets for use as collateral in Eurosystem refinancing operations. This extraordinary expansion of liquidity provided to euro area banks is reflected in the growth of the Eurosystem's balance sheet. Between the end of June 2007 and the end of April 2009, the balance sheet of the Eurosystem increased by about EUR 600 billion, and had reached EUR 1.51 trillion which is equivalent to 16% of the nominal GDP of the euro area. By comparison, the size of the Federal Reserve System balance sheet had reached 14% of the US nominal GDP at the end of April 2009.

III. The effectiveness of central bank policies

How effective have the ECB polices been in mitigating the impact of the crisis on the financial system and the economy? We can assess this by first examining the effects of the measures taken on the money and credit markets. The provision of unlimited amounts of liquidity (against adequate collateral) in the interbank money market and the sharp reduction in the ECB's key policy rates to exceptionally low levels have resulted in a significant improvement in money market conditions. This has contributed to the financing of the economy and has helped to contain the impact of the crisis on economic activity and price developments. The *spread* between the three-month unsecured money market rate, Euribor, and the three-month overnight index swap rate (Eonia swap rate), a widely-used measure of interbank market tensions, declined by almost 130 basis points over the past seven months, from the highs of above 180 basis

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[4] At the end of September 2008, the size of the balance sheet of the Eurosystem was EUR 1013 billion, an increase of 11% compared to its size at the end of June 2007, before the turmoil erupted.

points recorded in October 2008 to just below 60 basis points in mid-May 2009. [6] Moreover, the *levels* of money market rates have declined even more from the peaks reached last October. For example, the three-month Euribor rate was 1.26% at the beginning of this week (26 May), more than 400 basis points lower that its peak value (5.39%) last October. Moreover, the increasing transaction volumes in the unsecured interbank market and the lower utilisation of the ECB's deposit facility indicate that market liquidity has improved significantly.

It is sometimes claimed that money market conditions in the euro area are considerably tighter than in other major money markets. The facts disprove such assertions. The current levels of interest rates in the euro money market compare very favourably with the levels of the corresponding interest rates in the dollar and pound sterling money markets, where interest rate spreads and levels have also declined sharply over the past few months. For example, the level of the six-month Euribor rate at the beginning of this week (1.46%) was only somewhat higher than the corresponding Libor rate (1.22%) in the US dollar money market.[7] Therefore, effectively, over the past seven months, conditions in the euro area money market have improved substantially and they are broadly comparable to those in other major money markets, despite the higher level of the key policy rate of the ECB (the interest rate on the main refinancing operations (MRO) of the ECB). This outcome reflects the extremely low level (0.25%) of the ECB's deposit rate and the Bank's management of liquidity in the interbank money market.

The very low level of interest rates in the euro money market and the generous provision of funding by the ECB to the banking system have gradually resulted in a marked decline in bank lending rates, especially on short-term credit to the private sector. [8] More generally, the real average cost of financing for euro area non-financial

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[5] The effects of asymmetric information and counterparty credit risk on the structure of the interbank market and various policy responses are analysed in Heider et al. (2009).

[6] Over the past few days, the EONIA rate has temporarily risen above the rate of the ECB's main refinancing operations. This is due to changed behaviour on the part of banks showing reduced demand for ECB liquidity. This has temporarily diminished the levels of excess liquidity, thus driving up the EONIA rate. During the ECB's most recent refinancing operation, banks have reacted by increasing their demand again, and EONIA can be expected to drop below the main refinancing rate. Overall, however, the gradual reduction of the level of excess liquidity demanded by banks is an encouraging sign pointing towards the progressive normalisation in the functioning of the money market.

[7] The 3-month Euribor rate is very close to the 3-month GBP Libor rate (1.28%) but considerably higher than the 3-month USD Libor rate (0.66%) while the 6-month Euribor rate virtually the same with the six-month GBP Libor rate (1.49%).

corporations has declined by 43 basis points over the past five months to 4.47%, from its peak level reached last October. However, the cost of financing for speculative-grade-rated firms (i.e. the high-yield segment of the corporate bond market), although it has also declined somewhat, remains at unusually high levels (at about 19% in nominal terms), reflecting the continuing high degree of risk aversion of investors that has prevailed since the intensification of the crisis last fall.

Despite the improved conditions in the euro money market and in the average cost of bank lending to the private sector, bank credit standards have remained tight and the annual rate of credit growth to the private sector has decelerated steadily. Indeed, in recent months the flow of credit to both firms and households became negative. These developments partly reflect the reduced demand for banks loans by both households and firms. But they are also partly a consequence of the deleveraging of banks' balance sheets and persisting stresses in the bank wholesale bank funding markets. It is not easy, however, to disentangle the relative contribution to bank credit developments of demand and supply-side factors on the basis of the available evidence.

Having said that, it is evident that the effects of the financial crisis on banks' profitability and capital position have been sizeable. Banks' efforts to deleverage their balance sheets and build capital and liquidity buffers are constraining, other things being equal, their lending to the private sector. So far, by early May 2009, write-downs on the securities and loans of large euro area banks amounted to USD 179 billion, which corresponds to just over 18% of the total write-downs of major banks globally (USD 986 billion). [9] Euro area banks have successfully raised capital from both private and public sources, amounting to USD 192 billion, which exceeds the recorded write-downs. [10] Of course, a key issue is the amount of potential further write-downs that could be faced by global and euro area financial institutions and the additional capital that should be raised by them to safeguard their solvency. Recently the IMF has estimated that the total amount of potential future write-downs of euro area banks could be around USD

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8 For example, the short-term (i.e. below one year) bank lending rate was 3.52% in March 2009, some 2.5 percentage points below its peak value (6.03%) reached last October. This is still somewhat higher than the corresponding US bank lending rate at 2.04% in March 2009.

9 Of this overall figure of EUR 790 billion, USD 130 billion refer to the writedowns of euro area large and complex banking groups (LCGBs); while USD 49 billion relate to other euro area banks.

10 Of this total amount of USD 192 billion in capital raised, almost USD 155 billion refer to euro area LCBGs while over USD 37 billion have been raised by other euro area banks.

750 billion, largely on their loan exposures.[11] This estimate, however, is based on assumptions and methodology that can be challenged and it is subject to a high margin of error. Estimates based on alternative methodologies and assumptions yield a much lower, yet sizeable, figure.

Independently of the total potential impact of the financial turbulence and the weak economic activity on euro area banks' net income and capital position, it is evident that they will need to strengthen their balance sheets. In order to restore an adequate flow of credit to the economy, banks should take advantage of governments' commitments to support banks' balance sheets through capital injections, the provision of government guarantees on new bank debt, as well as through asset relief schemes aiming at removing troubled assets from banks' balance sheets. The common goals of these government measures in Europe and elsewhere are to safeguard financial stability, help restore the provision of credit to the economy and bolster confidence in the soundness of the financial system and in the prospects of the economy. Needless to say, the ongoing structural adjustment in the banking sector and the low confidence of investors in the soundness of some institutions cannot be counteracted by monetary policy and the provision of central bank liquidity.

IV. Bank support measures and fiscal stimulus

At present, the European economy is experiencing a mutually reinforcing interaction between, on the one hand, the weakening of economic activity and rising unemployment, and, on the other hand, the deleveraging of banks' balance sheets and the persisting bank stresses in some bank funding markets. The deleveraging process and the emergence of an adverse feedback loop between the real economy and the financial sector will affect the favourable impact of monetary policy and liquidity provision on the economy. These developments underscore the importance of effective implementation of the government measures to strengthen bank balance sheets and improve banks' medium-term market funding. These measures are complementary to the actions of the ECB and play a crucial role in improving the financing of the economy and fostering its recovery.

To give an idea of the scale of the governments' banks support measures, let me mention a few figures: until early May, banks in the euro area had received just over EUR

[11] See International Monetary Fund (2009).

113 billion of capital injections from governments and around EUR 300 billion of government guarantees. However, only one third of the commitments for capital injections had been used until the end of April and a smaller fraction, less than 18%, of the commitments to guarantee new bank debt have been called for. The use of government credit guarantees varies considerably across countries for several reasons. For example, banks' needs for such guarantees depend on the time profile of the maturity of their debt, but they also reflect the relatively retrained demand for loans by the private sector. Moreover, the unlimited financing provided by the ECB also explains the subdued demand in most countries for guarantees on short-term debt with maturity less than one year. Finally, certain factors might have discouraged the use of government guarantees, such as the associated "stigma effect" and the pricing, which may appear high in current market conditions.

Overall, the use of government guarantees on bank debt is considered satisfactory in most countries. At the same time, it is still too early to comprehensively assess the effectiveness of all bank support schemes in improving the longer-term funding of banks and in fostering bank lending to the private sector. The implementation of the bank support schemes has been gradual over the past few months and the evidence is relatively limited. But on one aspect, the facts already speak a clear language: namely that the use of guaranteed debt has been indispensable in providing banks with access to medium and longer-term financing: most –and in some countries even the totality – of the new bank debt issued since October last year has been government guaranteed. Banks should take advantage of the available government support and strengthen their capital buffers, not least with a view to the prospect that the current extraordinary liquidity provision by the ECB will not remain in place indefinitely. This issue relates to the exit strategy to which I will return shortly.

The governments' actions aimed at dealing with the crisis have not been limited to the support of the financial sector. Fiscal stimulus packages across the euro area amount to €100 billion (1.1% of euro area GDP) this year and a further €75 billion (0.8%) is planned for next year. Their financing as well the deterioration of budgetary balances due to the operation of the automatic stabilisers in the wake of the economic downturn, and the aforementioned bank support measures imply that the fiscal deficit for the euro area as a whole will surge, from 1.9% of GDP in 2008, to 5.3% in 2009 and further to 6.5% in

2010.[12] The dynamics of public debt are equally striking. Compared to last year, the debt burden of euro area countries will grow by almost 9% of GDP this year, from 69% (2008) to almost 78% (2009). These are worrying developments, especially when bearing in mind that this deterioration of public finances in the span of only one year wipes out the consolidation efforts of euro area governments of an entire decade.[13] By mentioning these figures I do not wish to deny that the current focus of fiscal policy on supporting the economy's recovery is not justified. At the same time, due attention should be paid that current actions do not undermine the public's trust in the long-term sustainability of public finances and the integrity of the EU fiscal framework. Governments have to have a credible commitment to achieve sound fiscal positions as soon as possible and should fully apply the provisions of the Stability and Growth Pact. Otherwise, we may face a serious risk that the current economic and financial crisis will evolve in the years to come into a fiscal crisis of major proportions. It is vital for the sustainability of our economies' growth performance that this risk should be prevented from materialising.

V. Prospects and exit strategies

What are the prospects for the euro area economy? The latest data show that economic activity contracted sharply by 2.5% in the first quarter of 2009, following a 1.6% decline in the fourth quarter of 2008, and confirm that the pace of economic activity in the first half of 2009 will be much weaker than projected by the ECB staff in March. For the second quarter of this year, however, we expect that the contraction in GDP growth will be less pronounced than in the first quarter. Over the past few weeks, survey data, including indicators of consumer and business confidence, in the euro area and other parts of the world suggest that the pace of decline in economic activity is moderating and that the euro area economy is stabilising. Although economic activity is likely to remain very weak for the remainder of this year – and this is consistent with the level of survey indicators – overall the available information confirms our expectation that the euro area economy will gradually recover in the course of 2010. Needless to say, the emerging encouraging signs leave no room for complacency in

[12] See European Commission (2009)

[13] General government debt of euro area governments was 77.4% of GDP in 1997, and had reached 69.1% in 2007.

view of several risks that lie ahead and the continued high uncertainty surrounding the economic outlook.

As central bankers, our core concern is, of course, inflation. The euro area is currently witnessing a process of rapid disinflation, mainly driven by the marked decline in global commodity prices since last July and associated base effects. This is likely to cause a U-shaped profile for headline annual inflation in the course of 2009. We expect headline annual inflation to fall further in the coming months, temporarily reaching negative levels in some months around mid-year. Thereafter, annual inflation rates are expected to increase again in the latter part of 2009.

Against the background of these price developments, is there a reason to be concerned about deflation? In my opinion, the risk of deflation in the euro area remains very limited. What we are experiencing in the euro area is a disinflation process reflecting reduced inflationary pressure in the supply chain due to lower input costs, a moderation of wage increases and stronger competition in a context of falling demand and excess capacity. This temporary disinflation does not constitute a persistent, broad-based and self-sustaining decline in the overall price level, which may be reinforced by the anticipation that prices will decline further in the future. On the contrary, expectations of inflation over the medium to long-term are solidly anchored at levels consistent with price stability. This firm anchoring of expectations and various measures of underlying inflation trends confirm that price developments over the medium and longer term will be in line with price stability. In 2010, HICP inflation is likely to remain positive and below 2%, in an environment of sluggish demand in the euro area and elsewhere.

Since last October, the Governing Council of the ECB has eased monetary policy significantly and rapidly, but also provided unlimited liquidity to the banking system and implemented "non-standard" enhanced credit support measures, which aim at ensuring that the monetary policy impulse deriving from the decrease in central bank rates is efficiently transmitted to the real economy. It is encouraging to observe that these policy actions, together with the substantial fiscal stimulus being implemented by governments and their measures aimed at supporting the banking system, are progressively having a visible positive impact on the growth performance of the euro area. In time, they should lead to a normalisation of conditions in financial markets and the recovery of the economy to a path of sustainable growth.

And this leads me to some final remarks on the conference theme – "planning an exit strategy" – which is crucial. An exit strategy will need to have three elements: an exit from the environment of exceptionally low interest rates and unlimited liquidity provision; an exit from the extensive government support measures to the banking system, and an exit from the substantial fiscal stimulus. Let me focus on the first, as this is in the hands of the central bank. For us in the ECB and the Eurosystem, when devising an exit strategy from the current extraordinary low level of interest rates and the liquidity support to the banking system, through standard and non-standard measures, it will be essential to strike a balance between, on the one hand, responding in a timely and effective manner to incipient risks to price stability as the economy recovers and market conditions normalise, and, on the other hand, winding down in a proportionate manner the support schemes and non-standard measures that have been implemented to mitigate the adverse effects of the crisis on the banking system and certain financial market segments. With regard to the latter, gradualism and clear communication by the central bank of any changes to the operational framework with sufficient lead time to allow market participants to prepare and adjust their liquidity management will be essential. The ECB and the Eurosystem are committed to pursuing such a gradualist approach as well as a timely and transparent communication policy.

VI. Conclusion

I started my remarks by pointing to the relevance of Heraclitus' insight for the last two years, namely that "all is in flux". He developed further his theory of continuous change and reasoned that all that exists, in fact, "simultaneously forms and dissolves". This line of philosphical reasoning led him to argue that *"the way up and the way down are one and the same"*. [14] I doubt, however, that bankers and investors would share this particular view of the philosopher, especially in the light of developments over the past few years. Let me conclude, however, on a reassuring note and a wish concerning the exit from the current crisis on the basis of the logic of Heraclitus that led him to the conclusion that "out of discord comes the fairest harmony" ***(έκ τῶν διαφερόντων καλλίστην άρμονίαν)*** – which, in the context of the discusions in this conference and in relation to our policy aims, would be translated into achieving sustainable growth in an environment of price stability and financial stability.

Thank you very much for your attention.

[14] See Kahn (1979).

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