Introduction: conference summary

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This book contains papers and proceedings from the Conference organised on 8-9 June 2006 to celebrate the 150th anniversary of the adoption of the name Banco de España by the Spanish Central Bank. On this occasion, distinguished public officials, central bankers, academics and financial market participants met in Madrid to exchange views on the changes in the role played by central banks in the recent past and the challenges ahead in the new century. The Conference permitted participants to discuss in depth the main issues currently shaping the monetary policy debate, along with other matters of great relevance to central bankers. In particular, the programme included sessions on Payment and Security Settlement Systems and Financial Stability. Moreover, there was a panel discussion on how current macroeconomic imbalances affected the economic outlook and the extent to which this was relevant for central banks. In what follows we summarise the papers presented and the discussions held at the Conference.

Monetary Policy

In the session on monetary policy, chaired by Governor Jaime **Caruana,** Alan **Blinder** presented an issues note dealing with up to sixteen relevant questions. The paper contained what proved to be relatively uncontroversial arguments in favour of collegial monetary policy decision-making committees, the involvement of central banks in banking supervision, the gradualist approach for interest rate decisions, the need to lead rather than follow markets and other issues. The commentators, however, focused their remarks on a few questions on which they presented their own nuances or sometimes contradictory views. These mainly related to the objective function of

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central banks, the selection of core versus headline inflation as a target variable, the limits to central bank transparency and the extent to which monetary policy should take into account relevant financial developments, such as asset price bubbles.

Regarding the loss function for central banks, **Blinder** made a case for central banks becoming more transparent about their policy objectives. In that respect he set out different practical and theoretical arguments which, in his view, would advise central banks to adopt something close to a quadratic loss function in which both inflation and unemployment (or output) deviations from target would appear as arguments. He would however accept that, in a systemic crisis scenario, central banks should depart from the regular objective function and give priority to financial stability considerations.

Governor Vítor **Constâncio** expressed reservations on the proposal to ask central banks to make explicit their own loss functions. First, using results by Michael Woodford, he highlighted several theoretical points. In particular, he reminded the audience that a loss function between inflation and the output gap was only a good approximation to consumers' welfare under specific assumptions, such as the absence of frictions other than sticky prices and the presence of cost-push shocks. Moreover, he recalled the practical difficulties of deriving robust estimates of the output gap. As a consequence, he preferred central banks not to be committed to a specific loss function or to a concrete instrument rule. ECB Vicepresident Lucas **Papademos** considered that the quadratic loss function proposed by Alan Blinder did not permit a realistic description of central bankers' behaviour and introduced unnecessary constraints. In particular, he stressed that the ECB did use a hierarchical ordering of objectives – in which price stability had an overriding importance – and recalled the underlying proposition that, in general, price stability contributed to reducing output volatility.

A second issue, related to some extent to the previous one, was the use of either headline or core inflation in the definition of central bank objectives. **Blinder** presented three arguments in favour of using a core inflation measure: lack of controllability of non-core components of CPI (such as oil or unprocessed food), better predictability of the core (less volatile) components and a better contribution by core inflation targets to sensible monetary policy in the face of supply shocks. The latter point stemmed from the relatively uncontroversial fact that central banks should not react to the direct effect of adverse oil shocks on headline CPI but only to *second-round effects,* the sole effects that would be captured by the core measure.

Constâncio voiced some sympathy for Alan **Blinder**'s conceptual arguments. He added that from a welfare standpoint it made sense to ask monetary authorities to attach greater importance to developments in the more rigid components of CPI, such as services, than to components whose prices change more flexibly, such as energy, and which were typically outside standard measures of core inflation. He nevertheless contended that the use of core inflation targets entailed practical and communication difficulties outweighing the potential advantages. These difficulties were spelled out by **Papademos,** who mentioned that there were two major requirements for the choice of the policy-relevant measure of inflation: first, relevance; and second, lack of arbitrariness in its definition. He argued that core inflation measures fell short in both aspects. Moreover, he recalled that core inflation was sometimes a poor leading indicator of the relevant headline (CPI) inflation. As for policy, he considered that a medium-term orientation of central bank's actions sufficed to avoid excessive reaction to transitory supply shocks of the type described by Alan **Blinder.**

A third aspect that aroused much debate was the issue of transparency. **Blinder**'s issues note presented the very powerful arguments in favour of central banks' transparency, which support the current general consensus on this matter. He saw transparency as required to guarantee both the effectiveness of monetary policy, which clearly depended on the ability of central banks to steer expectations, and the democratic accountability of independent monetary authorities. Moreover, he paraphrased Einstein to state that *"Every central bank should be as transparent as possible, but no more so".* He saw only limitedly effective bounds to transparency and stressed that, although most central banks had considerably increased transparency in the recent past, most of them still revealed too little information on their own forecasts. In particular, he criticised the practice by most central banks of making their published forecasts conditional upon exogenous interest rate assumptions. In his view, this approach might be subject to inconsistency, lack of transparency and potential instability problems. As an alternative, he proposed formulating conditional monetary policy plans running over the regular forecasting horizon (as did the central banks of Norway and New Zealand), and publishing those plans as part of a fully consistent set of macroeconomic projections.

This latter idea was criticised by commentators who otherwise agreed with the general principles in favour of transparency. In particular, both **Constâncio** and **Papademos** remarked that projections based on market interest rates were both internally consistent and transparent. The latter speaker also mentioned that the uncertainty surrounding any prospective path for future policy rates was so great that conveying such information to the public would hardly enhance clarity. Moreover, he noted the difficulties for a collegiate policy body to agree on a concrete policy path and to convey the relevant uncertainty to the public. More importantly, he considered it would be very problematic to prevent the public from perceiving the published path as a sort of pre-commitment device and warned of the risks this perception could pose for the credibility of the central bank.

Finally, all speakers devoted a significant part of their presentations to expressing views on the implications of financial stability considerations for monetary policy actions. **Blinder** argued that central banks should have a relevant role in safeguarding financial stability. He nonetheless saw no compelling reason for monetary authorities to include asset prices (or deviation of assets prices from fundamentals) in their objective functions and argued that the central bank was not responsible for misguided investment decisions. He also mentioned that asset bubbles could not be identified ex-ante and that even if they were, the central bank had no instruments to correct them. In these conditions, an attempt by a central bank to contain what it thought was a speculative bubble would most likely be ineffective and lead to suboptimal outcomes in terms of output and inflation. As an alternative, he defended the *mop-up strategy* under which central banks should only be ready to react as aggressively as needed – by loosening policy – if and when the bubble bursts. The approach followed by the Fed in the recent 1998-2000 stock market episode was, in his view, a successful example of how the ex-post *mop-up strategy* could suffice to avoid a serious economic downturn after a bubble burst.

Papademos argued that a *mop-up strategy,* though it might have worked well in specific episodes, was not always enough to prevent sharp reversals that potentially entailed very high costs in terms of macroeconomic stability. This provided a justification for central banks to adopt a prudent policy approach of *leaning against the wind* in certain exceptional episodes. While he would agree that bubbles were normally difficult to predict, it was relevant that episodes of abnormal asset price behaviour should tend to be associated with excessive money creation. In that connection, he stressed that although the ECB did not target asset prices, it carefully monitored capital markets and money and credit developments. That improved its ability to assess longer-term risks for price stability stemming from financial developments. **Constâncio** was also less sceptical than **Blinder** on the ability of monetary policy to respond, in specific circumstances, to exceptional financial developments. He mentioned in that regard the available evidence showing that price stability did not guarantee financial stability and emphasised that an environment with low rates and anchored inflation expectations could actually lead to excessive asset demand.

In that connection, Raghuram **Rajan** described a number of channels through which institutional investors' appetite for risk tended to be high in a low interest rate environment. He commented that, when riskless returns were not high enough, fund managers' remuneration schemes tended to make them more willing to obtain higher returns by taking up risky assets and to increase leverage. Moreover, those managers had incentives to make the extra returns look like the result of their professional ability *(alpha)* rather than the consequence of normal market remuneration of the extra *(beta)* risk undertaken. Investment in instruments (such as credit derivatives or emerging market debt) facing *tail* risk could help in that respect. Finally, he stressed that this type of behaviour spread very easily from one professional investor to another as they were typically subject to a sort of herd behaviour. All those remarks pointed, at the very least, to a potentially relevant new transmission channel of monetary policy impulses that, unlike the credit channel, did not operate through banks but through financial markets. This author also called for a careful reflection on all possible effects of a prolonged period of low interest rates on agents' behaviour and the extent to which they could be relevant for monetary policy decision-making.

In his lecture entitled *"Activism and alertness in monetary policy"*, ECB President Jean-Claude **Trichet** dealt with core issues regarding actions and communication by monetary authorities against the background of the ECB experience. He first criticised standard measures of policy *activism* based on the volatility of policy-relevant interest rates. In particular, he contended that the word *activism* was a strategic concept and should be assigned to the policy approach followed by central banks that were "constantly endeavouring to be faithful to [their] objective". Moreover, he stressed that an activist policy could be consistent with different policy paths as the concrete policy actions undertaken by an activist central bank depended very much on a number of structural and conjunctural factors, such as the size and nature of the shocks impacting the economy, the degree of price and wage rigidities, and the credibility of the price-stability objective. On that basis, he argued that the ECB's policy was not less activist than the FED in response to the economic slowdown initiated in early 2001. The smaller reduction of interest rates performed by the ECB was a logical consequence of the clearer predominance of supply shocks in Europe and the greater rigidity of the economy. In those conditions sharp policy adjustments were more likely to generate excessive output volatility. Furthermore, he recalled that the monetary accommodation went far beyond what could have been expected judging by past experiences in Europe, as the ECB was able to reduce interest rates to levels practically unprecedented in the last 50 years. This could only be accomplished in a context in which inflation expectations remained anchored at levels compatible with price stability. In this connection, **Trichet** attributed much of the success in keeping inflation expectations under control to the reputation gained by the ECB of following a "recurrent pattern of behaviour". Communication had played an important role in that respect as it helped to convey the clear message that the ECB was never pre-committed to unconditional moves but adhered to a *steady alertness* strategy which permitted policy to be permanently at the correct level to attain the price stability goal.

Payment and Securities Settlement Systems

The session on payment and securities settlement systems, chaired by ECB Executive Board Member Gertrude **Tumpel-Gugerell,** focused largely on aspects related to the prospects for financial integration in Europe framed in the ongoing developments in the global financial system.

The presentation by Anthony **Santomero** offered a comparative overview of the evolution of both retail and wholesale payment systems on both sides of the

Atlantic. **Santomero** compared first the extensive use of Giro systems and the relatively limited use of paper cheques in Europe with the opposite situation in the US, where the paper cheque was the vehicle used in half of all non-cash transactions. He explained that the discrepancy was a consequence of a number of economic and institutional factors, including the different way the banking industry was organised: while very fragmented in the US, it was dominated by a small number of large banks in most European countries. He also stressed the different role of central banks. In Europe, central banks had played a role in promoting electronic giro systems and had acted as the regulator of payment systems. In the case of the Fed, these types of functions had been combined with an active role as service provider in a context in which there had historically been restrictions on banks cooperating with each other on developing common infrastructures.

Concerning wholesale payment systems, **Santomero** indicated that the discrepancies were much smaller, as the ESCB was operating a real-time gross settlement system (TARGET) not dissimilar to FEDWIRE, created soon after the foundation of the US Federal Reserve in 1913. However, he identified a few discrepancies between infrastructures. In particular, he mentioned the different solutions given to meeting the liquidity needs of these systems. While Fedwire allowed for non-collateralised daylight overdrafts that were limited essentially by caps and self-regulation, Eurosystem central banks did not impose any quantitative restrictions but required overdrafts to be fully collateralised. In his view, however, the trend was clearly towards convergence. In the US, market forces were prompting more electronic clearing and fewer paper-based transactions. Moreover, it was very likely that Fedwire would rely more heavily on collateral – thereby resembling TARGET – in the future.

Tumpel-Gugerell gave an overview of the current situation of and challenges for the integration of payment and securities settlement systems in Europe. She summarised the steps undertaken for the integration of large-value and retail payments. The creation of TARGET initiated a process of consolidation of RTGS systems that would be further enhanced by TARGET 2, as it would provide the potential for further cost reductions. For retail payments, the Single European Payment Area (SEPA) initiative, although initiated by the private sector, had been actively supported by the Eurosystem. That project would imply the creation of standardised European payment schemes that would promote efficiency gains for end-users through a combination of better and cheaper services. She nevertheless considered that, in order to take full advantage of technological innovation, further standardisation was necessary. Moreover, what was required in her view was the enlargement of the market for payment services through more cashless transactions and the supply of value-added services to customers.

Those issues were also covered by Governor Christian **Noyer** in his intervention. Regarding wholesale payments he added a reflection on the interaction between TARGET 2 and Securities Settlement Systems. He raised the question of whether TARGET 2 should support a wide range of interaction models to foster competition between systems or should instead limit the interaction models to only one in the long run. He stressed that in the latter case the Eurosystem could only select the most efficient interaction model. As regarded retail payments, he highlighted the uncertainty surrounding the future structure of the retail payment industry, which ranged from a single infrastructure operating as a natural monopoly to competition between several systems. He also found it important to strike the right balance between encouraging the adaptation of payment systems to technological innovation and ensuring the safety of payments. Moreover, **Noyer** considered it necessary to strengthen business continuity requirements, and identified two challenges in that regard: to respect cost-efficiency and to seek consistency between different relevant regulations. He finally dealt with the role of the Eurosystem in this field. He recalled that the European central banks were payment service providers, facilitators of market and regulatory developments, and overseers, and stated that there was scope for further involvement in all three aspects.

In the field of securities settlement, **Tumpel-Gugerell** referred in her introductory remarks to the need for an integrated infrastructure. At the same time, she considered that the process in that direction was slow but continuous. She highlighted in that regard the arrangements for cross-border use of collateral in the Eurosystem and the reduction in the number of central counterparties and central securities depositaries. Furthermore, she argued against a single model for achieving integration. Rather, she embraced the concept of interoperability that encompassed the concept of vertical and horizontal integration and required the cooperation of all private and public interested players. Finally, **Tumpel-Gugerell** considered that although the integration process should be market-driven, authorities had a role to play. She said that this role was on one hand to correct market failures and on the other to remove legal and fiscal barriers to integration.

Alberto **Giovannini** expanded on this set of issues. He remarked that an EU financial system was not currently in place. Although there was no prohibition on trading between EU Member States, there were significant impediments and costs to cross-border financial transactions. The latter were reflected in different technical standards, market conventions, rules and regulations that were country-specific. The impediments were particularly severe in security clearing and settlement, where national monopoly structures remained. He considered that in that area maximum consolidation was justified as a means of taking full advantage of economies of scale. Moreover, in his view consolidation also helped mitigate systemic risks, since the impact of the failure of a single entity within an infrastructure would be smaller as the volume operated through that system increased.

Giovannini agreed with **Tumpel-Gugerell** that the reform strategy should involve both the public and the private sectors. However, he underlined that this approach involved a complex strategic interaction between both. Although he acknowledged that there had been relevant practical initiatives to remove obstacles to integration, he criticised the lack of boldness by public authorities in providing the appropriate legal and regulatory framework for European post-trading. **Giovannini** warned that this might have also slowed down the reform of standards and conventions to be undertaken by the private sector. Moreover, he noted that the focus had so far been the development of a *framework* to eliminate barriers to cross-border clearing and settlement. Little attention had however been devoted so far, in his view, to the structure of the industry *(arquitecture).* In particular, he saw a risk that the consolidation process might ultimately generate a socially-suboptimal pan-European natural private monopoly and called, therefore, for regulators to monitor the process carefully.

The regulatory issues attracted much attention in the general discussion:

– Governor Erkki **Liikanen** enquired about the possibility of using regulation to contain the natural tendency of monopolistic competitors to inflate the price of essential services by bundling them with other services more open to competition. **Giovannini** argued that bundling practices might not necessarily run against the interest of consumers, since the joint production and distribution of several services could yield synergies too. He noted that a pricing system conducive to more transparency could be achieved by requiring firms to offer the bundled services separately, as well. Under such an arrangement consumers could readily verify whether the price of the bundle reflected any underlying synergy or, on the contrary, a distortional monopolistic premium. He reasoned, however, that the centrepiece of the debate should first be the existing obstacles to stronger integration of clearing and settlement systems in the EU, an issue which, in his view, merited more interest than that so far received.
– There were also questions on whether there should be a role for the public sector in providing some services within an efficient EU-wide payment and settlement system. **Giovannini** argued that those core functions, which were necessary for the general sound functioning of the system but were not subject to strong technological innovation, might be performed by public agencies. As for other activities with larger scope for innovation, he recommended a stronger role for private participation. In order to avoid a socially suboptimal industrial structure, he proposed implementing a system of managerial incentives that placed special emphasis on cost minimisation rather than profit maximisation. This proposal could be put into practice by giving room to users in the system's governance boards.
– Reflecting on **Giovannini**'s proposal for a distinction between functions with low and high technological content, **Santomero** voiced his scepticism about the precise criteria to be followed in practice, and he argued that vir-

tually every single structure in the sector was subject to the dynamics of technological change. From that perspective, he maintained that it might not be possible to draw a line separating those functions within the system that should be undertaken by public entities and others that should be kept open to competitive forces. **Noyer** agreed with **Santomero** and offered the example of the French large-payments system as a real instance in which two different structures, one public and another private, coexisted. He also emphasised that the worst possible scenario for the general interest would be one in which a single profit-maximising entity prevailed.

Global Imbalances

The session on global imbalances was chaired by the ECB Executive Board member José Manuel **Gonzalez-Páramo.** Participants in the round table agreed that the size of these imbalances was unprecedented and exchanged views on the explanatory factors, the likely sustainability and persistence of the disequilibria, the need for a policy adjustment – and the types of policies needed in different regions – and the possible role of central banks in that regard.

A number of factors were mentioned as contributing to explain current account imbalances among the major economies: low saving in the US, both public and private, the latter possibly linked to high asset prices (a point emphasised in particular by David **Folkerts-Landau**) and/or excessive saving in China plus insufficient investment in other emerging countries in Asia (**Gonzalez-Páramo**). Vincent **Reinhart** observed that in some circumstances strong productivity gains might be related to substantial current account deficits, a point also mentioned by Governor Axel **Weber.** Most speakers referred to the role exchange rate policies in Asian countries (in particular China) were playing in maintaining and amplifying external imbalances, by preventing the adjustment of real exchange rates. It was also mentioned in this regard, however, that in the Chinese case the question of exchange rate flexibility could not be analysed in isolation, and that it was especially important to look at these issues in the context of the sequence of capital account liberalisation and the need to strengthen the soundness of the banking system.

Most participants agreed that current global imbalances were hardly sustainable. Only **Folkerts-Landau** expressed the view that the present configuration of imbalances was certainly unstable, but perhaps sustainable, to the extent that it reflected a certain equilibrium among key global players in the so-called Bretton-Woods II system. In that regard, present imbalances were a result of profound changes in the global economy over recent years (especially the integration of China), and did not reflect in his view an over-reaction of financial markets, and nor did they necessarily point to inappropriate economic policies in key countries. In particular, excessive emphasis on the need for an exchange rate appreciation in China might be risky insofar as such an adjustment might have negative repercussions on the domestic financial system, which was not yet robust enough to absorb such an adjustment. **Weber** stressed, however, that there were inherent risks and costs of reserve accumulation that needed to be taken into account when evaluating the functioning of the Bretton Woods II paradigm.

Governor Vittorio **Corbo** said there were two scenarios of correction, namely a hard landing and a soft landing scenario. Although the probability of the latter was higher than that of the former, the risks attached to the low-probability, high-risk scenario merited careful monitoring by the authorities.

Although there was considerable consensus around the idea that present imbalances were unsustainable, **Weber** expressed the view that they could persist longer than commonly thought, a view that gathered considerable support around the table. Among the reasons for this persistence, that most widely mentioned was the possibility of a reduction in home bias (the trend to accumulate domestic assets in excess of what would have been rational from an efficient portfolio allocation viewpoint), as a result of the globalisation process. Several speakers referred to the increasing empirical evidence of such a decrease in home bias. **Gonzalez-Páramo** mentioned that, according to ongoing empirical research at the ECB, this decrease was particularly strong for euro area member countries, whose level of home bias was also lower (around 65%) than in the US. **Reinhart** also stressed that the relevant variable was relative home bias as compared to other countries or regions rather than its absolute value. He also mentioned that valuation effects might offset the impact of exchange rate changes and that the impact of the latter, in the case of the US, might be more than offset by changes in the opposite direction of real growth in the rest of the world and therefore of net external demand for US products.

There was also considerable consensus on the need for policy adjustments to provide for a gradual correction of global imbalances, an objective that all speakers saw as desirable. In the view of **Corbo,** the solution would involve many players that would need coordinating, but national policies would in any case have to be strengthened to face a world of growing uncertainty.

In the area of policy adjustments, most speakers mentioned the need for an increase in public and private saving in the US, together with structural reforms to enhance the flexibility of the European and Japanese economies. Other elements of a package of policies to address global imbalances mentioned in the round table were: an increase in investment in East Asia (other than China), which remained at abnormally low levels since the Asian crisis in the mid-nineties; an improvement in the absorption capacity of oil-exporting countries, to increase the re-spending of their extra revenue as a result of recent increases in oil prices; and increased exchange rate flexibility and financial sector reforms in most emerging Asian economies.

Corbo addressed the particular case of Latin American countries, which in his view were playing a negligible role in financing the external US current account. He acknowledged that Latin American countries had made in general considerable progress in reducing their vulnerability over recent years, by improving their fiscal and monetary policy frameworks, reducing their debt levels and improving the structure of their debt and their current account positions, as well as the soundness of their financial systems. Despite this progress, countries with closer ties to the US and/or with a relatively high level of debt were in his view still vulnerable to a hard landing scenario.

What is the role of central banks in addressing global imbalances? As concerns monetary policy, **Gonzalez-Páramo** and **Folkerts-Landau** stressed that the best contribution central banks could make was to maintain low and stable inflation rates. Beyond this, **Folkerts-Landau** saw a role for central banks to use moral suasion for a gradual adjustment of real exchange rate levels where needed. Several speakers addressed the issue of whether central banks should have a role in addressing asset market bubbles or misalignments (some of which were apparently playing a role in global imbalances), a topic previously discussed in the session on monetary policy. The consensus view was that it was extremely difficult to envisage a situation in which monetary policy needed to react to movements in asset prices over and above their impact on traditional measures of inflation. **Folkerts-Landau** emphasised in this regard that sectoral imbalances were very difficult to address through monetary policy measures. In the same vein, **Reinhart** stressed that monetary policy should not pay attention to relative prices, or to asset prices per se.

There was also considerable consensus on the importance of the role central banks should play in maintaining financial stability and a soundly functioning infrastructure of financial markets, in particular in a situation in which global imbalances – and their correction – posed certain risks of stress for particular segments of global financial markets.

The general discussion and the subsequent replies by roundtable participants raised a number of interesting issues, including most notably the following:

– Whereas an increase in US savings seemed to be an ingredient in any policy adjustment scenario, it was less clear which component (public or private) should make the main contribution to the adjustment. Steve **Cecchetti** argued that it was extremely unlikely that private savings would adjust unless there were a dramatic change in the US housing market, whose strength explained the weakness of private saving, via wealth effects. According to this view, only fiscal policy could increase US saving. Vincent **Reinhart** agreed that private saving rates would increase only to the extent that there were an adjustment in asset prices.

- The question of the link between global imbalances and the low level of real interest rates was mentioned by Alberto **Giovannini.** There was consensus that we knew relatively little on the link between both features of the recent economic performance, and that further analysis was needed.
- The attractiveness of US capital markets as a magnet for the savings of the rest of the world was mentioned by Alan **Blinder.** Insofar as global imbalances were a two-sided phenomenon, policy prescriptions should not neglect the capital account side, a corollary of which was that Europe and Japan, in particular, should do more to attract capital from abroad.
- China's exchange rate policy was seen by some participants as part of a strategy to foster growth and exit from an underdevelopment situation, a strategy that required some understanding on the part of industrial countries. Other participants mentioned however that the strategy harmed most other developing countries competing with Chinese products in third markets and whose exchange rate was flexible and market-determined.

Financial Stability

In the session on financial stability – chaired by Governor Erkki **Liikanen** – Frederic **Mishkin** presented an issues note focused basically of how emerging economies could best harness the benefits of globalisation while avoiding its risks. In his presentation he highlighted the crucial role played by developing appropriate institutions, in particular the need for (i) strong property rights and legal system, (ii) fighting corruption, (iii) improving transparency and corporate governance and (iv) avoiding government participation in direct credit.

Mishkin described how globalisation promoted financial development, by fostering liberalisation and opening up to foreign financial institutions, which increased competition, improved the financial system infrastructure, introduced best practices, increased the efficiency of the financial sector and reduced the cost of capital. In Malcolm **Knight**'s words, globalisation was "a vital catalyst for implementing domestic structural reforms".

Nevertheless, **Mishkin** also acknowledged that there was a "dark side" to financial globalisation, as highlighted by the fact that the source of a number of recent banking and currency crises had been earlier process of liberalisation which, via a lending boom and surging capital inflows – and in the presence of typically weak supervisory frameworks – had led to financial instability. Governor Erkki **Likkanen** and Governor Guillermo **Ortiz** confirmed that most of the elements described in that part of the issues note were present in their respective experiences of banking crises in Finland and Mexico. The question therefore was which policies were most likely to ensure that countries fully exploited the benefits of globalisation while minimising the risk of crisis. **Mishkin** presented a comprehensive list of prudential regulation and supervisory measures and policies aimed at that objective.

The measures included limiting currency mismatches in the balance sheet of financial intermediaries; avoiding deposit insurance in the absence of proper institutions to limit moral hazard; restricting connected lending and the ownership of banks by commercial enterprises; ensuring that banks had sufficient capital; focusing on risk management and encouraging disclosure and market-based discipline. Other speakers generally agreed with this list of policy objectives, but qualified certain aspects. **Likkanen** warned that the absence of explicit deposit insurance could be equivalent in some emerging market economies to an implicit blanket guarantee of deposits which might be even worse from a moral hazard point of view. **Ortiz** agreed on the emphasis on disclosure and expressed his view that the listing on domestic stock exchanges of systemically important subsidiaries of global banks would help ensure appropriate market-based discipline.

One recommendation that triggered a substantial debate among participants was to facilitate the entry of foreign banks into the domestic banking system. **Mishkin** mentioned a series of advantages related to foreign banks' participation: a greater diversification of portfolios, more access to resources, less vulnerability to domestic shocks (and, as a corollary, a smaller incidence of crises, as shown by empirical evidence), better management and risk control mechanisms, and less probability and expectation of a bail-out in the event of a crisis. There was consensus among speakers on the advantages of foreign banks' participation, but a few questions were asked in that regard. **Likkanen** raised issues related to cross-border responsibility in supervisory policies and crisis management in the European context. The EU setting relied on two features – the principle of home-country control and the distinction between branches and subsidiaries – which, in his view, were increasingly difficult to implement due to the rapid increase in cross-border activity and the trend towards a relative growth of branches as opposed to subsidiaries. The problem, in his view, affected particularly the case of foreign banks systemically relevant in the host country, especially in the case of branches. He noted that Europe was increasing supervisory co-ordination to address these issues, without for the time being considering a change in the model, although alternative models might be considered in the medium to long term.

Ortiz remarked that banking efficiency improved notably in Mexico after the entry of foreign banks. To ensure, however, the benefits of globalisation, it was in his view necessary to improve competition. He mentioned that subsidiaries were managed by global banks like branches, a trend that posed problems for host country regulators and supervisors. He also expressed doubts on how consolidated supervision was treated in Basel II, in particular as concerned risk in domestic currency vis-à-vis the sovereign issuer in the host country, which should be based on external or internal ratings, implying an increase in the financing costs of host countries' sovereign debtors. To improve market discipline he also suggested that minority shareholders should have a seat on subsidiaries' boards.

There arose from **Mishkin**'s paper a series of questions as a result of the principal-agent problem inherent to financial regulation and supervision. In his view, to make prudential supervision work it was necessary (i) to ensure prompt corrective action when problems arose; (ii) to limit the perception of a policy of "too-big-to-fail", by means of which institutions of a certain size were expected to be bailed out by the government in the event of problems; and (iii) to provide resources, authority and a sufficient degree of independence (and the corresponding accountability) to regulators and supervisors.

A question which aroused considerable debate was the appropriate degree of discretion in supervisory policies in emerging market economies. **Mishkin** warned that an excessive degree of discretion might backfire against supervisors in the absence of a strong institutional and legal framework. He expressed in this regard some concern on the application of Basel II (in particular its second pillar) in these countries, which might not be appropriate at that particular point, since in his view it was better with a weak institutional environment to encourage market discipline rather than the discretionary power of the supervisors. Other participants regarded this question as a matter of proper sequencing. Malcolm **Knight** agreed that emerging market economies should adopt Basel II "only when ready", whereas **Likkanen** remarked that they could move gradually to a more flexible and risk-based approach.

One question that gave rise to much debate was the right sequencing between financial liberalisation and the creation of an appropriate institutional structure of the financial system. In the issues note **Mishkin** argued that the latter should be in place before financial liberalisation, but acknowledged that the incentives for reform mostly arose after liberalisation which, according to **Knight,** raised a dilemma which could not be answered with a single formula, the solution being country-specific.

Mishkin outlined in his presentation a series of recommendations concerning macro and structural policies. In his view a prudent fiscal policy, a monetary policy oriented towards the objective of price stability and implemented by an independent central bank, a floating exchange rate regime and openness to international trade were all ingredients that facilitated the task of fully exploiting the benefits of financial globalisation while reducing the risks. Concerning monetary policy, **Knight** emphasised the need to look further than the relatively short horizons of most inflation target frameworks and to pay attention to longer-term trends in liquidity and asset prices, which in the present environment of low inflation would imply avoiding complacency.

Likkanen stressed that the choice of the exchange rate regime depended on many factors, but that we should not exclude a priori that certain exchange rate pegs might prove to be an appropriate monetary strategy in some countries. He also raised the issue of the different nature of crises and the likelihood that the following one would contain new elements: market instability, the existence of systemic non-bank financial institutions, the increasing importance of liquidity and contagion in market transmission and the internationalisation of institutions and markets were mentioned as elements that might shape financial crises in the future.

In the final part of his issues note, **Mishkin** considered what industrial countries could do to ease emerging market economies' integration into the global economy. He concluded that opening up their markets to goods and services from emerging market economies was the main contribution advanced countries could make in that connection.

In the general discussion and the subsequent replies by speakers, a number of interesting issues were raised:

– Vittorio **Corbo** emphasised the need for parallel progress in trade and financial liberalisation, a view that was shared by other participants.
– Jaime **Caruana** expressed the view that Basel II was superior to Basel I even for emerging market economies, as it was more risk-sensitive. On the issue of whether it would require a more stringent treatment of sovereign debt issued in foreign currency for some emerging markets, he stressed that this treatment would in principle be more correct than the present one. He also mentioned that it was normal that global institutions should have a global view of risks, and that that should be compatible with adaptation to the local market. He also expressed a view in favour of transparency rules for subsidiaries, but only insofar as they did not run against property rights.
– **Richard Portes** raised the question of who would bear the costs in the event of an insolvency in a global institution and expressed the view that Memoranda of Understanding between supervisors did not normally address this issue with sufficient clarity, an opinion that was shared by other speakers. **President Trichet** referred to the specific case of the Eurozone and mentioned that its case was not so different than at the national level, where in general there were no strict, codified rules for crisis resolution. In his view similar arrangements were perfectly feasible in the euro area, without any need for further clarification.

Conclusions

Vicepresident Pedro **Solbes** focused his concluding remarks on two of the main topics of the Conference: financial stability and global imbalances. He first reflected on how the interest of supervisors had somewhat shifted focus from the analysis of individual institutions to a more broad macro-based approach. He linked this to the identification of potential risks for the financial system arising from the combination of expansive macroeconomic developments and herd behaviour by market participants.

At the same time, **Solbes** warned against simplistic analysis linking asset price increases and debt accumulation to imbalances that could merit economic policy action. He mentioned the example of the European monetary union which was, for countries like Spain, a structural shock justifying higher values for productive assets and a higher propensity to borrow as a consequence of rational behaviour by economic agents. He nonetheless stressed the importance of containing the influence of amplifying factors such as unduly expansionary fiscal policy or malfunctioning labour markets. Those factors could actually dampen the economy's ability to absorb smoothly the expansionary impact of shocks such as those generated by the monetary union.

As for global imbalances, **Solbes** dealt first with the origin of current account disequilibria. He saw that while surpluses generated in oil-exporting countries were a rational intertemporal response, that might not always be the case in developing countries with a net saving position. As the latter were now foregoing consumption to finance that of richer countries, the reasonableness of those imbalances was at least debatable, as were the current exchange rate policies of surplus countries and the fiscal policies in the US.

He recalled the risk of imbalances leading to the disorderly correction of exchange rates. At the same time, he considered as heartening the emerging consensus that currency stability was a public good whose preservation required joint action under a cooperative approach.

He finally remarked on the limits of standard policy tools. In particular, he saw a risk of focusing the debate excessively on exchange rates, as this could encourage protectionism and act as a distraction on other policy fronts. Moreover, standard demand policies were of little effect when imbalances were linked to structural problems that inhibited consumption or investment in surplus countries.

In his concluding intervention, Governor Jaime **Caruana** commented on the changes observed in the global financial system and on how these had affected the role played by central banks. In his view the process of financial development and liberalisation worldwide had increased the possibilities of risk-sharing among agents and enhanced the ability of private agents to make efficient intertemporal decisions, thereby increasing social welfare. At the same time, those developments had meant new challenges for monetary and supervisory authorities. For central banks, after years of broad success in delivering low inflation, the process of financial deepening had increased the complexity of the relationship between prices and financial stability. For **Caruana,** a long period of monetary stability coupled with low interest rates could arguably be conducive to certain types of financial imbalances, sometimes generated by excessive risk-taking by economic agents, which could eventually threaten the stability of the whole system.

Caruana agreed that the ex-ante identification of episodes of systemic financial distress was not an easy task and that, in advanced economies, they occurred typically with low probability. Still, if the likely consequences of those extreme episodes were sufficiently adverse, in his view the central bank could in very specific circumstances depart from its regular reaction function to consider actions aimed at reducing the risks entailed. He also contended that prudential policies could do much to promote the resilience of the financial system. That involved the design of regulatory and supervisory frameworks aimed at promoting appropriate risk assessment by providing the right incentives to individual institutions. Arguably, that included a better understanding of how risks evolved along the business cycle. He mentioned in that connection the New Capital Accord (Basel II), and underlined how this framework provided more risk-sensitive capital requirements and promoted transparency. The latter would help minimise the problems of information asymmetry between lenders, borrowers and authorities that had been at the root of recent financial crises.

Caruana also referred to the specific challenges faced by central banks within the EMU. He stressed, specifically, those related to the heterogeneity of the single currency area in terms of shock exposure, domestic policies and allocation mechanisms. In addition, he mentioned the steps that still had to be taken to build a fully integrated market for financial services and emphasised its relationship to the effective functioning of monetary policy. The Eurosystem had responded to the analytical challenges posed by cross-country diversity by paying due attention to the analysis of national economies when assessing the economic situation and the prospects for price stability for the euro zone as a whole. Moreover, it had been an active player in promoting higher financial integration – e.g. with the creation of TARGET – and had supported public or private initiatives aimed at removing barriers to cross-border financial transactions. He expected the Eurosystem to further strengthen its current policy approach in both areas in the future.

Caruana concluded his intervention stating that recent developments on the financial landscape and the closer interaction between financial and macroeconomic stability had made the work of central banks much more complex but also more relevant.