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## **Joint Banco de Portugal and European Central Bank Conference on Risk Management for Central Banks**

**Lisbon, 25 and 26 September 2017**

### **Conference Summary**

#### **Opening remarks**

The Governor of Banco de Portugal, Mr Carlos Costa, as the co-host of the conference, welcomed the speakers and other guests.

His presentation focused on the need for the risk management framework within central banks to take into account two sometimes conflicting realities. On the one hand, central banks are policy-makers and regulators and pursue a public interest mission of delivering price stability and financial sustainability. On the other hand, they are organisations committed to efficiency, adequacy and sustainability. In addition, they are under public scrutiny in both roles.

Risk management should widen its scope and cover the risks associated with its own decisions, given that they may generate uncertainties for economic agents. Indeed, the main policy-making risk is not to act at the right time – late decision-making may make it impossible to prevent imbalances from reaching a point where disruptive adjustment is inevitable.

Under certain circumstances, the central bank may also lack the necessary tools to achieve its policy objectives; or it may have to cope with deficiencies in the institutional setting or with failures in coordination with other authorities.

Policies intended to prevent tail risks, generally present in crisis situations, often carry significant risks for central banks' balance sheets. So, when deciding on their policies, central banks need to consider not only the overall economic impact of those policies, but also the possible implications for their own sustainability and independence.

Central banks, as service providers, face a variety of other risks, notably those affecting asset management, cash issuance, payment systems and information and communication systems, including so-called cyber risks. In addition, materialisation of any of these risks may have a severe impact on the central bank's financial position and reputation.

From this viewpoint, to be effective, central banks need to be trusted, which means they must be able to explain their policies, to be accountable for their use of taxpayers' resources and to lead by example. For this, they need to be the first to introduce new approaches, to think about risks and to spread best practice among the financial community.

The Governor of Banco de Portugal emphasised his conviction that a 'risk-free' organisation does not exist. Within the constraints of the institutional and regulatory environment, it is



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important for the central bank to define the appropriate level of risk appetite and tolerance, and to monitor this risk in an effective and suitable way.

Summarising, Mr Costa clearly signalled his conviction that it is possible to do better, but it is not possible to avoid risks – the art of the central bank is to deal with the risk without losing sight of the financial stability and monetary stability goals. In return, one must accept that some collateral effects are part of the process and are the price to pay in order to achieve the two goals.

### **Keynote speech**

**Yves Mersch**, Member of the Executive Board of the European Central Bank, as the conference's co-host, started off by highlighting the increasing importance of risk management within central banks (including the ECB), due to the sharp expansion of their balance sheets.

The occasion was an opportunity to map out some fundamental elements that should be part of the future risk management framework of a return to a more conventional monetary policy environment. The importance of this operational framework, which he compared to a compass, lies in the fact that it acts as a guide to the Eurosystem's performance. In Mr Mersch's opinion, it should be based on four basic principles:

1. balance sheet protection, which means that not all elements in the temporary framework should become part of the regular framework;
2. consistency, to ensure that innovation in financial products is not inappropriately exploited, causing greater risks to the balance sheet;
3. simplicity, ensuring that the general principles and rules applicable to risk control will be retained, thus contributing to the diversification of the risks assumed;
4. transparency, to give the central bank sufficient resources to ensure confidence in the credit quality assessment of assets accepted as collateral.

As they help make risk management an integral part of the decision-making process, these principles require risk to be measured in an objective and consistent way. Only thus can it be ensured that the central bank makes for its 'harbour', as mirrored in its mandate.

**Panel 1**, entitled 'Risk Management in central banks', was chaired by Anne Le Lorier, First Deputy Governor of the Banque de France.

**Helena Adegas**, Head of the Markets and Reserve Management Department and former Head of the Risk Management Department of Banco de Portugal, identified the challenges and specifics of the risk management function, focusing on a small Eurosystem central bank.



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Starting from the assumption that central banks tend to be more risk averse, at least ex ante, and given the public interest objectives entrusted to them, she spoke of:

- operational risks related to physical security and cyber threats;
- financial risks stemming from recourse to non-standard (monetary) policy measures; and
- reputational risks liable to affect their credibility.

Ms Adegas also stressed that the impact of the financial crisis on the central banks' risk profile and the responsibilities implied in the fulfilment of their mission may sometimes be at odds given their concerns as investor. Hence the importance of adequately measuring and reporting risks and ensuring the appropriate segregation of duties and tasks. In the particular case of Banco de Portugal, the creation in 2012 of an independent department devoted to risk management and the reinforcement of the risk governance structure were important steps taken in that direction.

**Andrew Hauser**, Executive Director for Banking, Payments and Financial Resilience of the Bank of England (BoE), focused his presentation on aspects related to the resilience of central banks' balance sheets, particularly on the importance of having support tools to identify the potential for crisis.

Although risk management concerns have always been integral to the Bank of England's mission, post-crisis focus reflects three key developments:

- the BoE balance sheet is much bigger and more complex;
- there is much greater public scrutiny of the institution's actions;
- given the massive extension in the scope of supervision, the central bank is expected to 'do unto itself as it would do unto others'.

The approach on stress tests, against a range of severe but plausible shocks, allows the BoE to model the potential use of its liquidity facilities and define the BoE's risk tolerance. Finally, Mr Hauser highlighted that the exercise is complemented by the identification of the policy actions available.

**Hans-Helmut Kotz**, Resident Fellow at Harvard University and Program Director at Goethe University Frankfurt, addressed the specifics of risk management in central banks, emphasising that the differences may be heightened depending on whether circumstances are normal or times are stressful. This notwithstanding, even in turbulent periods, information leads the way.

Mr Kotz also highlighted that the strategic interdependence between monetary policy objectives and reserve management keeps central banks away from comparisons with sovereign wealth funds. Finally, he warned that the differentiated degree of financial and fiscal power among Eurosystem members may affect the pursuit of policies.



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**Fritz Zurbrügg**, Vice Chairman of the Governing Board of the Swiss National Bank, started off by summarising the three challenges faced by risk management at the Swiss National Bank when defining asset allocation in foreign currency investments:

- 1) Restrictions stemming from monetary policy;
- 2) Expansion of the balance sheet and impact on gains and losses;
- 3) Accounting of non-financial assets.

Many central banks have expanded their balance sheets, notably the Swiss National Bank via an increase in interventions in the foreign exchange market since 2009. The diversification of investments led to considerable efficiency gains, but exchange rate risk had to be continuously monitored. Balance sheet expansion also leads to greater volatility in gains and losses, and a stable distribution of income should be promoted.

In addition, an expanded and diversified balance sheet poses challenges due to the inclusion of non-financial assets, and requires renewed attention on the limits to diversification, legal and regulatory requirements and the focus of public exposure.

**Panel 2**, entitled 'Lessons from the crisis for central banks – a policy view', was chaired by Javier Alonso, Deputy Governor of the Banco de España.

**Elisa Ferreira**, Vice-Governor of Banco de Portugal, identified two main lessons from the crisis:

- 1) Understanding macroeconomic equilibria requires knowing the interaction/transmission mechanisms of balance sheet positions of all agents in the economy, the behaviour of financial intermediaries and the interlinkages between the financial and non-financial sectors;
- 2) The European architecture was unprepared to face the financial crisis and, despite several major steps observed in recent years, we are still living within an incomplete setup.

Subsequently, Ms Ferreira briefly touched upon each one of these lessons, having in mind the policy implications that may arise for the euro area, highlighting:

- issues such as how to optimally coordinate policies and how to avoid time-inconsistency problems in this coordination are still outstanding. This is even more evident in a currency union where monetary policy affects the entire region, but financial imbalances may be local in nature;
- legacy issues need to be tackled also at the micro level, underscoring the need to address the interaction between macro and microprudential policies and guarantee that they are consistent;
- the crisis revealed several gaps in the European architecture which have been addressed to a certain extent during the past decade but still require further decisive work to complete the European architecture.



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**Richard Koo**, Chief Economist from the Nomura Research Institute, focused his presentation on what he considers to be the greatest risk faced by central banks in the near future: quantitative easing (QE) exit.

In fact, drastic liquidity injections resulted in minimal increases in money supply and credit. Monetary policy normalisation may thus be much more complicated than the start of QE programmes, since central banks will have to reduce balance sheets massively to avoid credit explosion, with adverse effects on interest and exchange rates during the phasing out.

**Ricardo Reis**, Professor at the London School of Economics, addressed balance sheet risk management and central bank independence. He started off by recalling that decades of dependence on fiscal authorities have led to hyperinflation and recurrent crises. Hence, the objective becomes to ensure the independence of the central bank, to prevent it from eventually becoming insolvent.

As a complement, Mr Reis stated two principles of risk management, based on two questions:

- 1) What are the limits, statutory or political, to the transfer of real resources between the central bank and fiscal authorities?
- 2) What are the sources of income risk?

On normalisation strategies, he recommended keeping reserves as the main policy tool, while also keeping quantitative easing as an additional tool. The management of the sell-off of assets should have in mind the path of potential losses and how they interact with the fiscal backing constraint and independence.

Finally, he signalled that longer-term deposits at the central bank may be an innovation moving forward, as they allow the matching of maturities and have a direct effect on the yield curve and expectations.

**Liviu Voinea**, Deputy Governor of the National Bank of Romania, stressed the role of central banks in safeguarding financial stability, especially in emerging market economies, where they tend to be allocated a wider range of functions, given that they are a source of expertise and guidance for the development of immature financial systems. In times of crisis, this role is reinforced to try and address the failures of fiscal policy, through a more active monetary policy.

Mr Voinea also spoke about a number of trade-offs in the context of central bank performance, at the level of scope (national vs. supra-national), efficiency (monetary policy vs. exchange rate policy), and consistency (monetary policy vs. macroprudential policy).

He concluded his presentation by recalling that dogmatism and populism are equally detrimental to financial stability and that central banks have to fight them.



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**Panel 3**, entitled 'Lessons from the crisis for central banks – a risk management view', was chaired by Fabio Panetta, Deputy Governor of the Banca d'Italia.

**Carlos Bernadell**, Director of the European Central Bank's Risk Management Directorate, started off by stressing the effect in terms of risk of the expansion of the euro area central banks' balance sheet, particularly since 2009, when the first Covered Bond Purchase Programme (CBPP) was started.

Subsequently, Mr Bernadell said that the risk management framework pursued by the ECB relies on the consistency of risk appetite with risk capacity, so as to safeguard financial independence, its credibility and reputation. Hence, the principles of risk efficiency and risk equivalence guide the ECB's market intervention within the scope of asset purchase programmes, to avoid market distortions.

Although the ECB's risk management framework is designed for both normal and crisis situations, it is necessary to maintain a forward-looking view of the risks that may emerge in the medium term, anchored in an effort to update the risk management framework and in the reinforcement of risk capacity consistent with the evolution of the balance sheet's size.

**Hugo Frey Jensen**, Governor of Denmark's Nationalbank, recognised the relevance of risk management in times of crisis, since central banks play the role of lender of last resort. Mr Jensen argued for the need for central banks to pursue a comprehensive and integrated risk management approach, with a view to preserving capital (and independence).

Reflecting this holistic view of risk in portfolio management, the 'Liquidity management/profit distribution framework' benefits from an agile organisation, focused on the core central bank tasks and supported by modern IT systems.

**Carol Ann Northcott**, Chief Risk Officer of the Bank of Canada, stated that, in the post-crisis environment, although banks are more resilient and have more balanced capital structures, there are challenges that may compromise the standardisation of international regulatory risk management frameworks, i.e.:

- the 'last mile' of the financial crisis
- understanding the next 'extreme, but plausible' scenario, and
- communication.

In the same vein, given that the reforms implemented had the main objective of preventing the materialisation of the risks that led to the recent financial crisis, this may give rise to a certain complacency toward the emergence of new threats, stemming from the evolution of



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the digital economy (e.g. artificial intelligence, recourse to extensive amounts of information and the growing links between organisations at a transnational scale).

Looking at the next steps, Ms Northcott highlighted:

- the need to find the energy to step out of comfort zones, think outside the box and identify new challenges;
- the balance between increased sophistication and simplicity;
- the implications stemming from regulations based on rules versus regulations based on principles;
- the need for ongoing learning tempered with credibility.

**Jean-Pierre Zigrand**, Associate Professor and Director of the Systemic Risk Centre of the London School of Economics, recalled that high price movements, driven by crucial news, are frequent in financial markets, and do not constitute a crisis. In turn, public announcements of important macroeconomic statistics are sometimes marked by major changes in asset prices after announcement. These changes signal a functioning market, capable of incorporating new information rapidly.

By contrast, the distinctive feature of crisis episodes is that they depend on the impetus of the endogenous responses of participants, i.e. financial crises seem to gather strength as they develop. Even if the initial shock vanishes, volatility remains high.

### **Keynote speaker**

The Governor of the Bank of Finland, **Erkki Liikanen**, made a retrospective appraisal of the impact of the financial crisis on internal governance and on the risk management framework of central banks, emphasising the main differences from credit institutions. His presentation focused on the following aspects:

- How should the central bank's mandate and responsibilities influence its risk management?
- How should the risk management function be organised in relation to the policy and investment functions within the bank?
- How should the accountability and transparency requirements be taken into account in managing central bank risks?
- How can financial regulation help the risk management of central banks?

Developments in the past decade showed that, ex post, central banks have to take on more risk to address the financial system's overall risks, so as to safeguard price stability and financial stability, which indicates appropriate risk management by the central bank, but also the importance of achieving adequate consistency across the different regulatory frameworks.



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The main conclusions of the presentation may be summarised into the following topics:

- The central banks must consider not only their own risks but also broader risks in the financial sector and the macro-economy when they make decisions about what risk to take;
- The challenges in organising the risk management function in central banks are more challenging than in other financial institutions, because of the interaction of their policy responsibilities;
- Lack of communication and lack of transparency can breed suspicion that the central banks are taking risks that are excessive relative to the benefits achieved with their policies;
- The challenges that the central banks' policy responsibilities cause to their risk-taking capacity are met more easily if the financial health of the banking system is sound; if the supervisory information is sufficient; and if crisis management procedures and institutions are up to their tasks.

**Panel 4**, entitled 'Central Banking and the risk management of central banks: what are the links?', was chaired by Cecilia Skingsley, Deputy Governor of Sveriges Riksbank.

**Sharon Donnery**, Deputy Governor of the Central Bank of Ireland, pointed out that we are going through a very dynamic and very challenging period for central banks, in particular for the risk management function, which is at the intersection of both central banking and supervisory structures, and the financial market.

The economic conditions arising from the 2007-08 financial crisis have required central banks to assume substantial financial risks in their balance sheets, with consequences at the level of risk profile, as a result of the price stability mandate. The regulatory reform under way has focused on better safeguarding the resilience of an increasingly globalised financial system and, importantly, mitigating the impact of future market failures.

In this regard, she mentioned three aspects arising from recent developments in regulatory frameworks, relating to risk management in central banks:

- the impact of regulation on central bank counterparties, and hence collateral for central banks;
- the prudent management of central bank balance sheets; and
- risk management and the co-ordination of supervisory and monetary policy mandates.

Ms Donnery stressed that the effects of an accommodative monetary policy and the legacy of the financial crisis still weigh on banks' balance sheets and the full effects and incentives of regulatory measures are perhaps not yet observable. Risk managers must thus always ask themselves whether they are adequately prepared for sudden changes in current circumstances and must also look ahead in consideration of the impact of future longer-term developments and how they will affect the risk profile of central bank exposures.





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**Colin Ellis**, Chief Credit Officer and Managing Director at Moody's, aligned his presentation around three arguments:

1. The Banking Union is a useful step; but even if credible and completed, it will not eliminate sovereign bank linkages. Although the impact in terms of credit quality assessment is positive given that stronger and more consistent supervision should uncover and resolve nascent issues more swiftly, the impact on the assessment of different instruments is mixed. Hence, some doubts persist, and the assessment of sovereign credit risk continues to have pervasive effects on domestic issuers.
2. IFRS 9 is a welcome step; but credibility of the standards will depend on consistent application. For that, Mr Ellis referred to the conclusions of the bank survey 'Global Banks – Moody's Survey: Capital Impact of IFRS 9 Adoption Will Be Modest For Most Banks'.
3. Ratings should not be used in regulation. In fact, ratings are forward-looking opinions of the relative credit risks of financial obligations and cannot be 'statements of fact'.

**Cosimo Pacciani**, Chief Risk Officer of the European Stability Mechanism, focused his presentation on the implications for risk management resulting from the development of regulatory frameworks.

Taking as reference the legacy problems originating in the financial crisis (non-performing loans and internal governance), the ongoing developments (IFRS 9 and Basel IV) and the restraints on future developments (technological infrastructure and geopolitical risks), the following relevant perspectives for risk managers were scrutinised:

- the profit corner, in which uncertainty has value;
- the reality angle, characterised by objectivity;
- the policy angle, based on consensus; and
- the angle of society and observers, the starting point.

He illustrated his analysis with several specific examples, to highlight the complexity of the task of ensuring a minimum degree of consistency, as is desirable, for the various regulatory frameworks.