

The CNB's Economic Research Priorities: 2013–2018

The Role of the Priorities

The purpose of the CNB's economic research is to produce outputs that are relevant to the central bank and are of a high standard. Such research outputs contribute to the CNB's policy formulation, policy credibility and human capital. A high standard is guaranteed by an international refereeing process which every output in the CNB's two research series (CNB Working Papers and CNB Research and Policy Notes) goes through. Relevance is ensured by medium-term priorities that guide the CNB's research projects into areas where expansion of know-how is most needed in its core activities, namely monetary policy, financial sector supervision and maintenance of financial stability. In 2012, the CNB identified its medium-term research priorities for 2013–2018 by considering the challenges that lie ahead.

The Research Challenges

When formulating the 2007–2012 research priorities, the CNB's needs, such as (i) the need to give research support to the CNB's newly acquired core activities and (ii) the need to put more emphasis on research in the European context to face the challenges of EU entry, were major factors. In the 2013–2018 period, the major challenges are shaped by international events.

Keeping pace with the evolving economic research frontier

The economic research frontier in macro-modelling and macro-finance modelling will evolve considerably in response to the recent financial crisis. Various alternative modelling approaches will be put forward. However, a consensual approach is likely to take a long time to materialise. Therefore, it will be necessary to continuously assess which of the alternative approaches should be tailored to the CNB's needs, and in which areas the CNB should be helping to push the frontier forward. Another challenge will be to incorporate several alternative approaches into policy debates.

Fully reflecting linkages between monetary, fiscal and macroprudential policy

Besides monetary policy and supervision, macroprudential policy will require research support in the forthcoming years. In addition, with fiscal sustainability becoming a prominent policy topic, the research will need to reflect fully the potential linkages between monetary, fiscal and the newly emerged macroprudential policy as well as their implications for core modelling activities such as macroeconomic forecasting and stress testing.

European policy coordination will trigger international research cooperation

In the forthcoming years, economic policies are likely to become more coordinated on the European level. This will be reflected in closer international research cooperation. For example, the ESRB (European Systemic Risk Board) will enhance macroprudential policy coordination across the EU in the years ahead. The ESCB (European System of Central Banks) has anticipated that by establishing the MARS (Macroprudential Research Network). It will be important to provide research support to the CNB's core activities and at the same time to participate actively in the intensified international research cooperation.

Research Challenges and the Four Research Areas

The challenges summarised above will impact on the research in all four research areas that reflect the CNB's key research interests: monetary policy, macro-modelling and forecasting, financial stability, and the real economy and fiscal policy.

A. Monetary Policy

In the forthcoming years, monetary policy research will need to reflect the new role for central banks in maintaining financial stability, which will present various challenges to traditional monetary policy decision-making. Also, the interaction of domestic monetary policy with the economy and monetary policy of the euro area, which faces its own challenges, will be an important issue. In addition, the implications for monetary policy of high openness as well as of structural changes that distort the standard business cycle, which the Czech economy has not experienced for long due to its transition in the 1990s, should be considered.

B. Macro-modelling and Forecasting

In the years to come, the research is likely to offer new alternatives to the current modelling practices of central banks. It will be important for the CNB to contribute to this effort and to assess which of the new approaches should be incorporated into its modelling suite. Furthermore, it will be essential to debate not only how to extend the existing core CNB forecasting model, but also how to diversify the portfolio of models for policy-making purposes and, importantly, how to combine alternative approaches to obtain clear policy messages. The increasing complexity will demand more emphasis on robust modelling and on international cooperation.

C. Financial Stability

Financial stability research will continue to gain in prominence at the CNB in the years ahead. Macroprudential policy implementation and issues related to systemic and sovereign risk are examples of newly emerged research topics. In addition, the international aspects of macroprudential policy, represented by the ESRB's activities, will influence the CNB's research. It will be important to keep refining those areas where the research frontier has been reached (e.g. stress testing) as well as to open new challenging topics (e.g. sectoral financial stability). It will also be important to utilise fully the microdata available.

D. The Real Sector and Fiscal Policy

In the forthcoming years, continuing real convergence will interact with the economy's long-term behaviour and its determining factors, which will not be as stable as in the past. Specifically, the impact of the recent crisis on potential output, subsequent fiscal consolidation and population ageing are among the factors that may change both the speed of convergence and long-term behaviour. It is therefore important to increase the robustness of monetary policy decisions by delivering supply-side oriented and disaggregated analyses and helping to improve the CNB's macroeconomic predictions and stress tests. Long-term fiscal sustainability and flexibility of the fiscal system will become prominent topics because of the inevitable monetary, macroprudential and fiscal policy interactions.

The research challenges will be reflected in the 2013–2018 priorities specified for the CNB's four research areas.

Research Priorities for 2013–2018 by Research Area

A. Monetary Policy

Czech monetary policy in the post-crisis environment

The Czech economy exhibits specific features that – combined with the global consequences of the recent crisis – have to be considered by monetary policy. Research should contribute by discussing issues such as the formation of inflation expectations, the estimation of the equilibrium values of key variables, and the channels through which monetary policy affects the economy. It is important to base research on frontier knowledge of monetary theory and, at the same time, to tailor it to features of the Czech economy such as high openness and a history of economic transformation.

The inflation targeting framework

The Czech National Bank is among the pioneers of the inflation targeting framework in emerging economies. Therefore, its research should continue contributing to international discussions about this framework, for example by offering views on the role of central bank credibility, communication, the optimal inflation rate and the conduct of inflation targeting in a small open economy under global deleveraging or under fiscal dominance.

The traditional conduct of monetary policy and new roles of central banks

The current intensive discussion about the financial stability responsibility of central banks should be reflected in the research agenda. Institutional interactions of the traditional conduct of monetary policy with the new central banking tasks and their influence on both the monetary policy framework and transmission mechanisms are among the topics that need to be explored.

Economic ties with the Eurozone

The interaction of the Czech economy with the Eurozone will be dynamic due to Eurozone enlargement as well as the impact of the crisis on the EMU. Therefore, exploration of the economic ties with the Eurozone will remain an important research agenda. Moreover, the research in this area should support the discussion on the costs and benefits of euro adoption by looking at topics such as the experience of forerunners, implications of the ERM II framework for monetary policy, and new developments in OCA theory.

B. Macro-modelling and Forecasting

Enriching the CNB core forecasting model

Macro-modelling research should focus on enriching g3 – the CNB’s core forecasting DSGE model – with state-of-the-art features such as a fiscal block, a labour market block, credit and risk-taking channels, financial frictions, asset pricing and various policy interactions. Some of these features can be incorporated directly into g3, and some into its suite of extensions.

Focus on robustness

Further research efforts should be directed towards robustness checks. Models robust to expectation assumptions and assumptions of linearity and models reflecting structural changes in the economy in turbulent times (e.g. changes in the business cycle and inflation dynamics) will be of interest. Methodologies should be developed for parameter calibration, such as systematic surveys, and for validating the micro-foundations and underlying assumptions of the core forecasting and stress-testing models.

Model diversification and the incorporation of alternative approaches into policy debates

It will be important to identify in timely fashion which of the new modelling approaches should be incorporated into the CNB’s modelling suite. Models going beyond rational expectations, models with non-linear interactions between the real economy and the financial sector, bottom-up macroeconomic models, large structural Bayesian VARs and agent-based modelling are among the approaches to monitor. Given the increased model uncertainty, incorporating alternative models into policy debates will be an interesting research area.

International cooperation

To foster research synergy, joint research modelling projects should be encouraged within ESCB research networks and working groups such as the Macroprudential Research Network, the Working Group on Econometric Modelling and the Working Group on Forecasting.

C. Financial Stability

The impact of new regulatory measures on financial institutions

The impact of numerous regulatory initiatives, including capital and liquidity regulation, dynamic provisioning, Solvency II and Basel III, should be researched. The research should focus on the operationalisation of these measures in the Czech Republic, their transmission channels into the financial system as well as their impact on economic activity, on the business models of different financial institutions (risk taking, financial innovations) and on the efficiency of supervision.

Macroprudential policy for small open economies

Macroprudential policy, which has become a new responsibility for many central banks, should receive research support. Optimal capital requirements and funding structure, consistency between monetary, fiscal and micro- and macroprudential policy, regulatory arbitrage, and transmission channels of macroprudential policy tools and their calibration are among the priority issues.

Systemic risk and risk of interconnectedness

The area of systemic risk applies not only to different financial entities, but also to other sectors and has a significant cross-country dimension. Of main interest are the issues of cross-border financial flows and contagion, the driving factors behind leverage increases, such as globally low interest rates, and the impact of deleveraging on the economy. Alternative measures of risks, including network analysis, and early warning indicators of crises and bubbles should be researched.

Sovereign risk

The recent fiscal difficulties of some developed economies have generated interest in deeper analysis of sovereign risk, including its impact on economic dynamics, in particular fiscal policy, its endogenous linkages to the financial sector as well as cross-border issues.

D. The Real Sector and Fiscal Policy

Real convergence and shock propagation

In order to help with calibrations of the CNB's models, the propagation of internal and external shocks (particularly to oil and world commodity prices) to the domestic economy, as well as exchange rate pass-through and inflation persistence should be researched. The research should also identify the main barriers to a more efficient response of the product and factor markets to shocks. Updated analyses of cross-country differentials and their impact on inflation and real exchange rate appreciation in the period after the crisis will be needed.

Economic growth and competitiveness

Factors behind economic growth, supply-side performance and competitiveness should be covered in detail, with the aim of providing estimates of the economy's long-term trends for the period characterised by the repercussions of the recent crisis, including fiscal consolidation and volatile financial integration. Furthermore, structural changes, labour market dynamics, changes in market structures and measurement issues of important macroeconomic variables should also be researched.

The impact of fiscal policy on the economy

There is a need to understand the impact of fiscal policy on the economy when public debts are high and the potential of fiscal policy to counteract economic shocks may be limited. The research should also address limiting factors on fiscal policy stemming from the evolution of the EU fiscal framework and the stabilising role of fiscal policy under different exchange rate regimes.

Long-term fiscal sustainability

The issue of long-term fiscal sustainability has gained prominence as the public debt level has increased. The research in this area should focus on population ageing and its implications for the economy. Particular attention should be paid to microeconomic incentives embedded in the tax and expenditure systems as well as in the pension system, given its large weight in the overall welfare system.