



## 6 ECONOMIC RESEARCH

Národná banka Slovenska is among the leading institutions of economic research in Slovakia. The prevailing focus of its research activities is applied research, the results of which may have practical applications. Although the Research Department is responsible for most of the research performed at the bank, it often works in cooperation with other NBS departments as well as with experts from other institutions in Slovakia and abroad. Research based on such broad cooperation is in its function and content better able to complement various analytical activities related to the bank's core operations. The bank's research work often employs non-standard approaches and provides more comprehensive answers to difficult economic, monetary and financial questions related to the domestic and external economic environment.

The priority areas of research are determined in accordance with the medium-term research strategy approved by the NBS Bank Board. They comprise: monetary policy, fiscal policy, financial stability, the labour market and real economy, economic modelling, and the functioning of monetary union. At the same time, specific research tasks take into account the central bank's information requirements. Professional oversight of the research agenda is ensured by the NBS Research Committee, composed of experts from Slovakia and abroad. The Committee influences the NBS research agenda mainly by approving the research objectives of individual researchers and by monitoring their outputs on a regular basis.

International cooperation, especially within the framework of the European System of Central Banks (ESCB), is crucial to ensuring that research is up to date and relevant, in terms of both its subject-matter and methodology. In 2014 NBS researchers continued to participate in the work of four Eurosystem/ESCB research networks.

One of these networks, the Macro-prudential Research Network (MaRs), concluded its four-year

work with an international research conference at which its most important findings were presented. NBS's cooperation with the MaRs centred mainly on the development of early warning systems and systemic risk indicators.

Another network, the Household Finance and Consumption Network (HFCN), completed a new household survey wave, which provided datasets on the current financial situation and expenditure of households in the euro area (including Slovakia). The information obtained will enhance understanding of how different macroeconomic shocks, as well as monetary policy and institutional changes, affect the financial situation of households.

A third network, the Competitiveness Network (CompNet), focuses on developing a consistent analytical framework for assessing competitiveness, one that takes into account both macroeconomic and microeconomic information. The NBS researchers involved in this network in 2014 worked mainly on the use of firm-level indicators.

As for the fourth network, the Wage Dynamics Network (WDN), national research teams completed preparations for, and then conducted, the WDN survey on firms. The survey results will allow detailed analysis of changes in wage and price formation, and in approaches to employment, in the wake of the global economic crisis.

The organisation of research seminars and participation in research conferences are integral to the process by which new ideas are put into practice. Thus, the domestic research community benefited from many research and discussion seminars held at Národná banka Slovenska. In 2014 NBS organised or co-organised more than 40 seminars. Eight were conducted as part of the series entitled Bratislava Economic Seminars, organised jointly by NBS, the Department of Economic Policy at the University of Economics in Bratislava, and the Centre for Economics and Finance of the Faculty of Mathematics,



Physics and Informatics at Comenius University in Bratislava.

In 2014 the most prominent economic research event involving NBS was an international conference that the central bank co-organised with the Institute for the Study of Labor (IZA) and the Central European Labour Studies Institute (CELSI). Entitled 'European Labour Markets and the Euro Area during the Great Recession: Adjustment, Transmission, Interactions', the conference focused on labour market developments during the Great Recession. Altogether 27 researchers, Slovak and foreign, from universities, central banks and international institutions presented results of their work. The keynote speakers were Klaus F. Zimmerman, Director of the Institute for the Study of Labor, and Jordi Gali, from the Centre de Recerca en Economia Internacional (CREI) and Universitat Pompeu Fabra. At the conference, the NBS Governor presented awards for outstanding dissertations or doctoral theses in the field of economics to three Slovak university students who had entered the competition entitled 'NBS Governor's Award' in 2014.

The main conduit between new economic research findings and their application in practice is the publication of research analyses, papers and articles in academic journals. The more extensive outputs are typically published as peer-reviewed NBS working papers, or as discussion papers or policy papers.<sup>23</sup> Work of transnational importance, usually the results of joint international research, are often published as research or occasional papers of foreign institutions (especially the ECB).

The list of research papers published on the NBS website was extended in 2014 by contributions related to almost all the core research areas, and in particular fiscal policy, financial stability, the real economy, and economic modelling.

In assessing the results of economic policy, it is necessary to heed the impact of the business cycle, and to that end NBS research in 2014 included analyses of potential output and the output gap (i.e. the difference between potential and actual output) in the Slovak economy. In conjunc-

tion with the Council for Budget Responsibility, NBS researchers examined different techniques for estimating potential output in Slovakia and proposed a more robust approach that delivers more stable projections both over short-term and longer-term horizons.

NBS research in 2014 also addressed the impact of fiscal policy on the business cycle. In the case of the Visegrad Four (V4) countries, it was demonstrated that the impact of fiscal policy is contingent on which stage of the business cycle the given economy is at, and that the impact is far higher during recessions than during periods of expansion.

Analysis of the real and nominal convergence of the Slovak economy revealed a hiatus in the catch-up process with respect to real economy indicators. By contrast, nominal convergence indicators showed a significant narrowing of differences between Slovakia and the EU average. Detailed analysis of long-term developments in absolute and conditional convergence in the EU confirms that, owing to a number of external factors, the pace of catch-up is higher than that generally stated in the literature.

The Slovakia-wide survey conducted as part of the Eurosystem's Household Finance and Consumption Survey revealed that almost every household in Slovakia owns some assets. Fully 90% of households owned housing assets, which made up the largest share of their real assets. The proportion of indebted households is lower than 30% on average. Another noteworthy finding is that Slovak households spend approximately 30% of their income on food. The survey also shed light on differences between regions.

Research in the area of financial stability is highly topical at present, especially given the continuing uncertainty in financial markets. This line of inquiry encompasses macro stress testing, in other words testing of the impact that specified adverse developments in financial markets or the real economy have on the banking sector as a whole. The main results of the research confirmed that the banking sector in Slovakia appears to be relatively resilient to adverse developments.

<sup>23</sup> Full texts of NBS research analyses and papers can be found on the NBS website, at <http://www.nbs.sk/sk/publikacie/vyskumne-studie>



Several results of research projects conducted jointly with staff from other ESCB central banks were disseminated in ECB papers. One paper studied the impact of institutional factors on the indebtedness of euro area households<sup>24</sup>. Another paper concerned a new approach to the measurement of competitiveness and described the establishment and utilisation of

a new database<sup>25</sup>. A third paper examined financial stability in EU acceding and candidate countries<sup>26</sup>.

The most notable results of NBS research in 2014 were published in academic journals, mostly in Slovakia, but some also in international refereed journals<sup>27</sup>.

## 7 EUROPEAN AFFAIRS AND INTERNATIONAL COOPERATION

### 7.1 EUROPEAN AFFAIRS

#### EUROSYSTEM AND SINGLE SUPERVISORY MECHANISM

The Eurosystem comprises the ECB and the national central banks of all the EU Member States that have adopted the euro. The NBS Governor is, by virtue of his position, a member of the ECB's main decision-making body, the Governing Council, which is responsible for setting monetary policy for the euro area. In 2014 the Governing Council also began adopting decisions concerning the Single Supervisory Mechanism (SSM), which is responsible for the supervision of credit institutions in participating EU Member States. The Governor is also a member of the ECB's General Council, a transitional decision-making body that will cease to exist once all EU Member States have adopted the single currency. The ECB's decision-making bodies are assisted in their tasks by the committees of the Eurosystem, European System of Central Banks (ESCB) and SSM, established for all the principal areas of central bank activities. During 2014 more than 80 NBS employees participated directly in the work of these committees and their working groups. The NBS departments' work on Eurosystem tasks constitutes a substantial part of the central bank's activities.

#### EUROPEAN UNION

In 2014 the financial sphere saw several changes initiated by EU legal acts. For NBS, the most important changes concerned the first and second pillars of the banking union and the area of cashless payments, specifically the migration to the new SEPA payment instruments.

In April the NBS Governor, Jozef Makúch, attended the informal ECOFIN Council meeting in Athens. The issues addressed at the meeting were the SSM, the Single Resolution Mechanism, banking structural reform, and the enhancement of financing for small and medium-sized enterprises.

In September Governor Makúch attended the informal ECOFIN Council meeting in Milan. The meeting focused on international cooperation in the area of financial services and on the SSM.

### 7.2 COOPERATION WITH INTERNATIONAL INSTITUTIONS

#### INTERNATIONAL MONETARY FUND AND WORLD BANK

The main events of the IMF and the World Bank in 2014 were the IMF/WB Spring Meeting in April and Annual Meeting in October, both held in Washington DC.

Slovakia's commitments to the IMF increased in 2014. As at 31 December 2014 the country's commitments to the IMF under the Financial Transactions Plan (FTP) and bilateral loan agreement were, respectively, SDR 142.2 million and SDR 27.8 million. In September 2014, after consultation between Slovakia and the IMF, the 2013 bilateral loan agreement between the two sides was extended to cover the period up to 2016.

In June 2014 the IMF conducted its annual Article IV Consultation Mission to Slovakia, in

<sup>24</sup> Working Paper 1639: *The distribution of debt across euro area countries: the role of individual characteristics, institutions and credit conditions.*

<sup>25</sup> Working Paper 1634: *Micro-based evidence of EU competitiveness: the CompNet database.*

<sup>26</sup> Occasional Paper 136: *Report on financial stability challenges in EU candidate and potential candidate countries.*

<sup>27</sup> Economic Letters; *Journal of Risk and Insurance*; *Czech Journal of Economics and Finance.*