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7

Economic research

1

international
scientific
conference

21

analytical
commentaries
and blog
posts

10

articles
in scientific
journals

number

1

RePEc
ranking

22

seminars

18

research
papers



Economic research

In response to the COVID-19 pandemic, some new research topics emerged in 2020. Analyses of the pandemic's direct impacts on the economy came to the fore, while several longer-term research projections were temporarily put on hold. The exchange of experience and new knowledge moved increasingly into the online space and away from offices, classrooms and conference rooms

The rapid adaptation to new working conditions was seen in NBS research outputs, not only in their greater number compared with the previous year, but also in their quality. On the basis of its working papers and articles published in peer-reviewed journals, Národná banka Slovenska has become a leading institution in the economic research field in Slovakia.²⁰

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The number and quality of publications increased

The results of NBS research work are presented primarily in the form of peer-reviewed papers. In 2020 the Research Department published seven working papers and three occasional papers on the NBS website. A further eight papers were co-authored by NBS staff members with colleagues from abroad, and these papers were published on the websites of foreign institutions, including the US Federal Reserve and the International Monetary Fund.

New research in the area of financial stability drew heavily on the results of a [survey of indebted households](#) that NBS initiated in order to gain a better understanding of the impacts of the pandemic crisis on the financial situation of households and consequently on the financial stability of commercial banks. The results confirmed the severity of pandemic's effect on Slovak households and its upward impact on household debt risk. More detailed calculations showed that Slovak banking sector would be able to absorb potential loan delinquency losses.

²⁰ ideas.repec.org/top/top.slovakia.html

Another paper addressing the financial situation of households found that households' financial literacy, confidence in their own financial skills, and confidence in the economy were strong determinants of whether households decided to participate in markets for risky financial assets and bonds.

One paper that was valuable from a financial stability perspective, and potentially also for monetary policymaking, suggested the construction of a new indicator for identifying the phase of the financial cycle in Slovakia. Because this is an empirical approach based on indicators that monitor the risk build-up phase, it is satisfactorily reliable and may be used by economic policymakers for macroprudential purposes.

In the area of monetary policy research, one NBS working paper produced more precise estimations of the equilibrium interest rate in Slovakia, taking into account specifics of the Slovak economy. Another study, on non-standard monetary policy measures, attracted significant international interest. The authors compared the research findings of central bank researchers and academic economists and found that central bank papers reported larger effects of quantitative easing on output and inflation. Central bankers were also more likely to report statistically significant effects.

As regards fiscal policy, research activity in 2020 included detailed analyses of current fiscal policy instruments and of the second pillar of the pension system. In the light of the weaknesses identified, the studies provided recommendations on how to improve the efficiency of public financing and to enhance the performance of the pension system. On the fiscal front it was recommended to follow best practice in the structure of revenue and expenditure, to undertake key structural reforms, to build up institutions and capacities, and to improve processes. As for the second pillar recommendations, they included setting stronger limits on investment strategies and fee policies and establishing a centralised fund.

In 2020 global value chains (GVCs) and the factors determining a country's position within GVCs were the focus of NBS research concerning the real economy. The results show that larger economies have a greater share of domestic value added in the exports of trading partners and a lower GVC participation rate; at the same time, however, they have a better position in GVCs. By contrast, a greater volume of foreign direct investment is associated with a greater share of foreign value added in exports, a higher GVC participation, and a lower position in GVCs. The calculations also indicate that domestic currency appreciation increases the ratio of domestic value added in exports to gross exports.

Economic modelling research in 2020 brought interesting practical findings concerning the application of different modifications of distribution symmetry tests for economic time series. According to the calculations, the choice of subsampling method does not have a significant impact on symmetry test robustness. One important finding with practical implications was that asymmetry in key economic time series occurs far less frequently than is presented in the literature.

The need for a rapid response to the pandemic-related changes was reflected in the higher number of [analytical commentaries](#) and [blog posts](#) published by NBS research staff during 2020. These concerned mainly the pandemic's impact on households and their financial situation, including their debt servicing capacity, and the impact of lockdowns and income losses on firms' solvency, workforces and productivity. Current issues other than those related to COVID-19 were also addressed, including, for example, the transition to digital currency and the impacts of climate change.

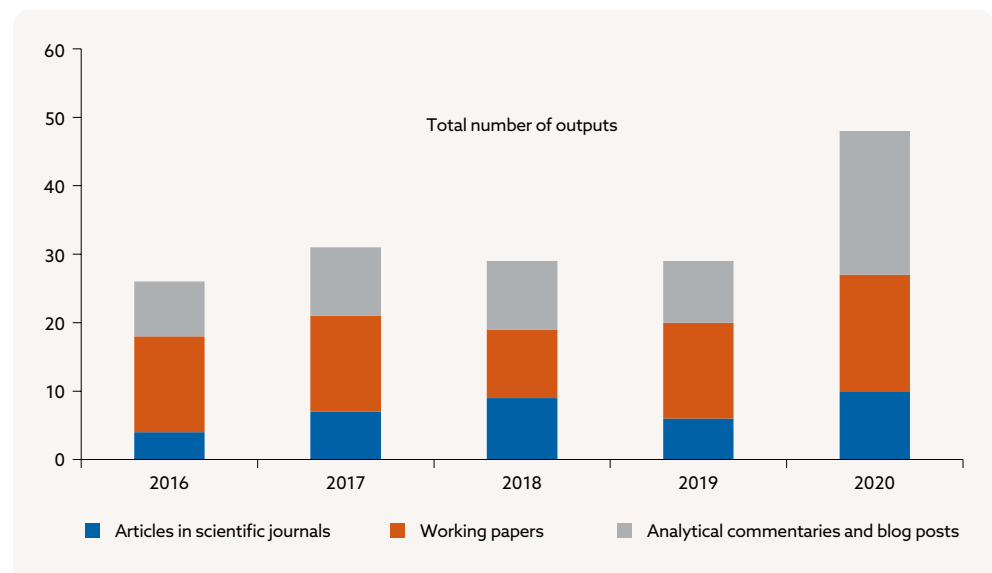
The most important NBS research findings in 2020 were published in respected peer-reviewed journals in Slovakia and abroad, including the *Journal of International Money and Finance*, the *Journal of Macroeconomics*, *Oxford Economic Papers*, *Economic Systems*, *Economic Modeling*, and *The B.E. Journal of Macroeconomics*.

The total number of NBS research outputs were notably higher in 2020 than in any previous year.



Chart 45:
Published NBS
research
outputs

Source:
NBS calculations.



External research cooperation moved into the online space

Apart from a few seminars earlier in the year, all NBS research events in 2020 were held virtually. The Bank hosted a total of 22 research and discussion seminars during the year; some enabled NBS research staff to obtain quick feedback on their findings or suggestions for developing their calculations, and some provided a platform for external researchers to present the results of their work.

In 2020 Národná banka Slovenska and the independent Competitiveness Research Network (CompNet) jointly organised a virtual three-day international conference entitled “[Sustainable development, firm performance and competitiveness policies in small open economies](#)”. One of the two welcome addresses to the conference was made by NBS Deputy Governor Ľudovít Ódor. The keynote speech was given by WTO Chief Economist Robert B. Koopman, who spoke about the COVID-19 pandemic’s impact on foreign trade and economic growth. The conference had more than one hundred participants, and its specialist discussions featured presentations from thirty foreign and Slovak economists, including four NBS representatives.

The CompNet/NBS conference highlighted several important messages, including the following: that the economic impacts of the COVID-19 pandemic differ from sector to sector, but uncertainty has increased across all areas of business; that firms will be more carefully considering the production efficiency benefits of global value chains in the light of potential disruptions to foreign supplies, and this may bring changes to the structure of international trade; that despite the number of acute pandemic-related challenges, governments are expected to pursue reforms leading to economic transformation and sustainable growth; and that after measures focused on ensuring sufficient liquidity during the pandemic crisis, the emphasis is expected to shift to support for long-term investment, especially investment in the areas of green technology and innovation.

As a way of strengthening its external cooperation, the Bank each year offers several talented students, mainly from established foreign universities, the opportunity to complete a research internship. In 2020, as part of its cooperation with the academic community, the Bank invited an associate professor from the University of California to make a study visit, with her work focusing on political economy and international finance.

In 2020 the Bank maintained its involvement in CompNet and in two ESCB research networks: the [Household Finance and Consumption Network \(HFCN\)](#) and the Price-setting Microdata Analysis Network (PRISMA). The NBS members of the HFCN were largely engaged in preparations for the fourth wave of the Household Finance and Consumption Survey (HFCS). Much of their work consisted of participating in research and analytical projects that used data from previous HFCS waves in order, among other things, to find answers to several questions about the impacts of the COVID-19 pandemic on households.

The PRISMA research network studies the price-setting behaviour of individual firms and retail traders using micro price datasets. In 2020 the network focused mainly on analysing the frequency of individual price changes and on revising the methodology used to calculate the Harmonised Index of Consumer Prices (HICP).

As for [CompNet](#), a forum for research and policy analysis in the areas of competitiveness and productivity, its NBS members in 2020 organised the above-mentioned conference and were involved in preparing the new version of the [CompNet dataset](#), accompanying manual, and follow-up [Firm Productivity Report – May 2020](#).