

Research Agenda 2022–2026

Economic Analysis and Research Department, Oesterreichische Nationalbank



Foreword

The Oesterreichische Nationalbank (OeNB) is an integral part of the Eurosystem, which consists of the European Central Bank (ECB) and the national central banks (NCBs) of the EU member states that have adopted the euro. In this context, the *Economic Analysis and Research Department* of the OeNB is committed to informing policymakers' decisions in the Eurosystem and in Austria in particular, and in Europe as well as in international institutions in general. In a nutshell, we analyze topics that are crucial to central banks.

Our activities cover both policy-oriented work and fundamental academic research. This way, we lay the foundation for OeNB positions that feed into the decision-making of the Governing Council of the ECB, the Eurosystem and the European System of Central Banks (ESCB), which is made up of the ECB and the NCBs of all EU member states.¹

As a small central bank, it is wise to concentrate on a select few topics. Apart from monetary policy, a clear must-have for any central bank, we zero in on Central, Eastern and Southeastern Europe (CESEE) and some other topics for which we have already made a name for ourselves. Going forward, we are also setting up a track record on visionary topics such as central bank digital currency (CBDC) or decentralized finance. In line with the OeNB's mandate, we provide forecasts for the Austrian economy. To not lose sight of the big picture, we also keep track of global macrofinancial interdependencies and European integration.

Our team of roughly 50 economists is organized in five sections that focus on:

- monetary policy,
- business cycle analysis,
- Central, Eastern and Southeastern Europe,
- international economics, and
- research.

Together, we cater to a diverse audience that ranges from our top management, the Eurosystem and the ESCB to national and international economic policymakers, academia as well as the broader public. Our aim is to both engage in a dialogue with experts and the public alike. This is why we are keen to spread the word about what we do in plain language, using traditional and social media.

On the following pages, we are outlining our priority topics for the next five years, broken down by the five abovementioned focus areas. Naturally, we will react to new developments in an agile way. We will fine-tune our research agenda on a yearly basis and will, among other things, continue delivering our expertise via two OeNB flagship conferences, the Economics Conference in spring and the Conference on European Economic Integration (CEEI) in fall. We regularly publish our research in our quarterly journal, the OeNB Bulletin, and in our OeNB Reports series. To reach new audiences, we have started publishing the OeNB Blog. In our Working Paper series, we deliver to academia and prepare for scientific publications.

Birgit Niessner

Head, Economic Analysis and Research Department

¹ To learn more about the economic research we engage in and why we do so, listen to our podcast (in German): <u>Warum betreibt eine Notenbank Wirtschaftsforschung?</u> - Oesterreichische Nationalbank (OeNB).



Monetary policy

The Oesterreichische Nationalbank is Austria's competence center for central banking, monetary policy, prices, and inflation. As a member of the Governing Council of the ECB, the Governor of the OeNB actively shapes the euro area's monetary policy, which is geared to the primary mandate of price stability. Historically, the OeNB has a two-century track record as Austria's monetary authority.

In the *Monetary Policy Section*, we are responsible for the following key research areas:

- core central banking monetary policy issues, including the operational framework,
- objectives, strategy and instruments of monetary policy in general and with regard to the euro area in particular,
- possible heterogenous economic effects of monetary policy, transmission of monetary policy through the financial system and to the real economy,
- side effects and proportionality of monetary policy
- current and future monetary policy challenges, such as monetary policy normalization and structural change,
- the interaction of monetary policy with other economic policies, such as macroprudential policy,
- inflation dynamics including the main drivers of inflation ranging from short-term determinants, such as commodity price shocks, to medium and long-term determinants, such as labor market developments globalization and climate change,
- formation and determinants of inflation perceptions and expectations, their implications for future inflation developments, their implementation in dynamic macroeconomic models, and their relationship with effective monetary policy,
- prices and inflation in general, including tools, methods and economic models for inflation analysis and forecasting.

Together with the Director of Economic Analysis and Research, we represent the OeNB in the ECB's Monetary Policy Committee (MPC) and coordinate the OeNB's input to the MPC.

In terms of policy output, we develop the OeNB's position on monetary policy and inflation-related issues. We prepare briefings and draft speeches and presentations for the OeNB Governor. We also actively participate in ESCB and international research networks and working groups. Furthermore, we carry out empirical monetary and inflation research at academic level and write OeNB and external policy publications as well as internal analyses. Additionally, we provide expert advice to other OeNB business areas, to authorities outside the OeNB and to the public. We give external lectures and presentations and develop models, methods, databases, data visualizations and other tools needed to carry out our tasks.



Business cycle analysis

To ensure macroeconomic stability in the euro area, it is necessary to assess macroeconomic developments in the individual member states. Within the ESCB, the national central banks analyze the economic conditions in their countries. The *Business Cycle Analysis Section* of the OeNB is in charge of both analyzing and forecasting macroeconomic developments in Austria. Our research priorities range from inflation, the labor market to fiscal monitoring, productivity and the real economy.

Inflation

In light of the recent surge in inflation, we need to better understand inflationary processes in a high-inflation environment and to adjust our forecasting tools. Since the onset of the pandemic and the war in Ukraine, we have seen large sectoral differences in price developments, which is why we are refining our disaggregated inflation analysis. In addition, we continue to center our analysis and research on the medium- and long-term determinants of inflation.

Labor market

Labor market developments are critical for assessing future inflation trends. We are therefore paying special attention to long-term determinants of labor supply, and to demographic and labor force participation trends in particular. We are also looking into the consequences of the structural mismatch in the labor market and are exploring ways to resolve this issue. These factors will largely determine future wage developments and thus also inflation.

Fiscal monitoring

In fiscal monitoring, we carefully analyze the current and future government budget and debt developments. In addition, we examine (a) the impact of fiscal policy measures using macroeconometric and microsimulation models, (b) the interaction between fiscal policy and inflation and (c) the further development of the fiscal framework at the European level.

Productivity

With regard to productivity, we analyze productivity trends and their drivers in the overall economy and at the sectoral level by using macrodata. At the microlevel, we aim to answer questions, for instance, on sectoral efficiency or the development of the share of zombie companies by using internal OeNB data on firms and banks.

Real economy

We are committed to reacting swiftly to new challenges, such as the COVID-19 pandemic or the war in Ukraine, in all our priority areas, but especially when we analyze the real economy. We regularly draw up analyses of current economic developments and macroeconomic projections. Apart from that, we also provide in-depth analyses of business cycle developments at the sectoral level. Furthermore, we shed light on questions about long-term growth determinants and potential growth.

All our individual research activities come together in the <u>economic projections for Austria</u>, which we prepare twice a year in close cooperation with the ECB. In this context, we continuously hone our short-, medium- and long-term models, adapting them to new economic circumstances. One



priority is to enlarge our tool kit with more detailed sectoral models. Granular and high-frequency data should further sharpen our analysis in the future, especially in the areas of nowcasting, short-term forecasting and economic monitoring. Since Austria is a small open economy and part of the euro area, external economic conditions are key inputs to our projections for the Austrian economy. We therefore closely monitor economic developments in the euro area as a whole and in individual euro area countries.

Central, Eastern and Southeastern Europe

The Austrian economy, especially Austria's banking sector, are tightly interlinked with the economies in Central, Eastern and Southeastern Europe (CESEE). The team of the CESEE Section contributes to a better understanding of European integration by explicitly focusing on economic developments in the CESEE countries. As we continuously monitor and analyze macroeconomic and financial developments in individual CESEE countries, we are capable of offering a consistent cross-country comparative perspective on the region. We evaluate economic convergence and financial market developments and assess the implications for the Austrian economy and financial stability. The CESEE region has been hit by several economic and political crises in recent years; so, we are placing increased attention on risk analysis, including financial, economic, trade and climate risks.

Our research activities revolve around two priority areas that are crucial for monetary policy and financial stability in the interplay between CESEE and euro area economies.

Real and monetary convergence

• first with respect to CESEE countries' integration into both the European Union and the euro area, and second with respect to structural change and transformation, particularly in the context of global value chains and the green transition

Financial stability in CESEE

• first with respect to risks to financial stability and possible spillovers, with a special focus on Austrian banks' exposure to the region, and second with respect to euroization, i.e. the use of the euro, and household finance

We draw on a wide variety of data sources, including a large-scale survey which we conduct in ten CESEE economies,² the <u>OeNB Euro Survey</u>. The survey mainly helps us (a) understand what determines individuals' financial decisions and (b) ascertain, in particular, the use of foreign currencies, such as the euro and the US dollar, in the region. Thanks to the flexible design of the survey, we can include topical, policy-relevant questions in a timely and efficient manner.

For our macroeconomic monitoring, we rely on various tools and models and systematic risk assessments. In addition, our extensive expertise builds on a steady stream of research papers, economic analyses and other CESEE-related activities.

² Six EU member states: Bulgaria, Czechia, Croatia, Hungary, Poland, Romania, and four non-EU member states: Albania, Bosnia and Herzegovina, North Macedonia and Serbia.



Within the ESCB, the OeNB's CESEE Section acts as a bridge between the euro area and CESEE. Together with the OeNB's EU and International Affairs Division, we represent the OeNB in the ECB's International Relations Committee (IRC) and coordinate the OeNB's economic input to the IRC. Furthermore, we act as a partner for the ECB in monitoring and analyzing EU candidates and potential candidates, in particular in the Western Balkans and Ukraine. We also contribute to the ECB's analysis of the international role of the euro by monitoring and analyzing euroization in CESEE and by regularly estimating the extent of currency substitution in the region, including the use of euro cash.

Our expertise in CESEE economies, including Russia and Turkey, has helped build the OeNB's reputation as a competence center for CESEE in international policy-making institutions and academic institutions. We closely cooperate with a broad range of partners that include central banks in the region and international financial institutions.

International economics

The International Economic Section focuses on international business cycle analysis and the study of global economic trends, including climate change. Our analyses and research aim at understanding (potential) implications of these issues for the euro area.

Specifically, we address (de)globalization trends by investigating changing dynamics in trade, capital, and migration, and we model international real and financial interdependencies and spillovers. Furthermore, we analyze the economic and financial consequences of climate change and monitor the global economic environment, the resilience of European integration, and advanced and emerging economies of global importance. Based on our work, we prepare briefings and notes for the Governor and the senior management and contribute our expertise to the Monetary Policy Committee, the International Relations Committee and other ESCB and OECD committees and networks. In our work, four focal areas stand out:

Global economic trends

The world economy is crucially shaped by large-scale events, geopolitical shocks as well as by global trends and linkages. We analyze trends in international trade, cross-border investment and migration, and their implications for the global and euro area economy. We are building a comprehensive database by collecting indicators to monitor and study (de)globalization trends and their effects. This timely tool allows professionals and the general public to better address and understand key developments in the international division of labor, with a particular focus on the competitiveness of the EU.

International spillovers and macrofinancial interdependencies

Policy shifts or shocks abroad, be it monetary, fiscal or financial, may trigger spillovers that influence the scope for conducting optimal monetary policy. We monitor such developments, model their implications and identify their transmission channels. In particular, we focus on global real and financial interdependencies, trade, capital flow dynamics and the global financial cycle. For our analysis we use both empirical methods and structural models.



Economic and financial consequences of climate change

The evolving climate crisis and policies to mitigate its impact pose a number of challenges to the economy and the financial system. Central banks have to consider climate-related risks potentially affecting price stability, the transmission of monetary policy, and financial stability. The transition toward a carbon-free economy implies financing investments in green technologies which provides new opportunities for firms. We assess the economic impacts of climate change focusing on central bank related variables like prices and interest rates.

Resilience of European integration

Our portfolio also contains issues related to the long-term resilience of European integration. Key topics in this field are heterogeneities across the EU member states, and capital markets integration and development. Our overarching goal is to identify avenues for enhancing economic prosperity and financial stability in the EU. Taking a forward-looking perspective, technical cooperation activities of the OeNB – coordinated by REFIE staff and benefitting primarily EU candidate countries and potential candidates – contribute to the resilience of the euro area of the future.

Research

In the *Research Section*, we provide answers to complex policy questions facing a central bank. We use modern methodology from economics, statistics, data science and other scientific disciplines. We help the OeNB reflect its goals, both deepen and broaden its expert knowledge in core fields and find new perspectives on future challenges. We are currently pursuing three priority topics:

The digitalization of money and finance

Innovations in digital technologies, such as social media, artificial intelligence, big data analysis, cloud computing, the Internet of Things or blockchain technology, bring about fundamental changes in socioeconomic structures, organizational patterns, business models and consumption patterns. These trends are affecting money and finance too. On a related note, the ECB is currently exploring a digital euro. Accordingly, we are focusing on empirical research about user requirements and adoption, should a digital euro become a reality in the European payments landscape. The ongoing digital transformation also changes financial intermediation. We therefore examine the opportunities and risks that result from growing interlinkages between the traditional banking system and its new competitors using technological innovations, such as stablecoins and decentralized finance. We cooperate with OeNB payment and market infrastructure experts, with the Eurosystem's High-Level Task Force on Central Bank Digital Currency and with experts in economics and computer science, in particular with our research partners at the Complexity Science Hub Vienna and the Security and Privacy Lab of the University of Innsbruck.

Economic microdata

Our Economic Microdata Lab generates and evaluates microdata to provide greater insight into timely economic topics. A prime example is the <u>Household Finance and Consumption Survey</u> (HFCS), for which we collect information on assets, liabilities, income and consumption of households and are responsible for the Austrian segment of the HFCS. The HFCS is unique, as it



offers the only micro-level information on Austrian households' total balance sheet. As the Household Finance and Consumption Network collects household-level data for other euro area and EU countries, we may compare Austria with its European counterparts. HFCS microdata are also being used to develop the novel Distributional Wealth Accounts (DWA) of the ECB. In this way, the HFCS is integrated in the System of National Accounts. To comply with quality standards of national statistics, we are further enhancing the methodologies of the HFCS survey, also with a view to generating DWA inputs. HFCS data help address the key topics of households' financing decisions and the impact of borrower-based macroprudential policy measures. Microdata on companies that we provide, e.g. via our insolvency dashboard, may also enter the equation. The Economic Microdata Lab aims to provide frontier research, applying up-to-date econometric methods as well as modern ways to illustrate microdata-based findings.

Core macroeconomic issues for central banks

Central bank researchers traditionally study macroeconomic relations and the design of sound monetary policy. For a long time, the focus was on topics like the transmission mechanism, the Phillips curve or monetary policy rules. Emphasis has now shifted to (a) the role of credit and the financial sector for macroeconomic fluctuations, (b) the challenges for monetary policy in a low interest rate environment and (c) the impact of economic policy decisions on different socioeconomic groups. We thus plan to study the causes of low real interest rates and their impact on asset markets, household finance and the changing interplay of the economic system. Next to accounting for the crucial housing sector, we are developing a conceptual framework to capture long-run trends like the demographic transition, the decline in real interest rates and the deregulation of financial markets. We will also study the interaction of these factors with shortrun influences and with monetary and macroprudential policy.