Wiener Institut für Internationale Wirtschaftsvergleiche The Vienna Institute for International Economic Studies

## **List of Projects**

### **Birgit Buschbom**

Research Centre International Economics (Forschungsschwerpunkt Internationale Wirtschaft, FIW) Austrian Federal Ministry of Education, Science and Research October 2012 - February 2025

wiiw is part of a consortium which is setting up a "Centre of Excellence on International Trade". It provides the appropriate infrastructure and assistance for a research community in international trade. Thus it can achieve a sustainable coordination among different research projects, research institutes and other activities in the broad field of economics of international trade (FIW German abbreviation). This project will also create a network of experts and asure the integration of international projects. The Centre of Excellence fulfils the following tasks: (1) to develop a research programme which assists external political decisions and activities concerning the European Union and other multinational organisations in a sustainable fashion, (2) to provides access to relevant databases in an easy and transparent way, and (3) to encourage and enhance the development of know-how with regard to foreign economic affairs in Austria. This Centre of Excellence will be an important source of information for the research community in Austria, the Austrian government with regard to foreign affairs as well as the social partnership. It collects and increases the knowledge of the given research institutes and provides it to the public in a user-friendly manner.

http://www.fiw.ac.at/

# Eastern Europe Before Transition: Digitisation of data and analysis of CESEE's command economies Anniversary Fund of the Oesterreichische Nationalbank May 2021 - April 2024

In order to better understand the industrialisation spurt and later the (financial) crisis and collapse of the command economies of Central, East and Southeast Europe (CESEE) as well as the applied economic policy mix before and during their transition to market economies, including the decisive role of initial conditions, we will digitise and publish online wiiw's economic statistics for Central, East and Southeast Europe for the period 1944–1992; harmonise the historical data with current statistical classifications; digitise and publish online wiiw's research reports for 1972–1992; and produce a series of working papers describing the data, summarising the literature and providing economic analysis on the key research areas related to the development and demise of the command economies. The activities in this project will be coordinated in close cooperation with our partners in the Research Centre for the History of Transformations (RECET) research network of the University of Vienna.

# Industry 4.0, migration and the labour market adjustment: an intra-European perspective Anniversary Fund of the Oesterreichische Nationalbank October 2021 - March 2024

The mechanism through which robot adoption affects the labour market, skill composition and wage levels, and consequently the pull and push factors of migration, is the main focus of the study. The project will comprehensively study this phenomenon by analysing various interactions between the adoption of robots, labour demand and wages, and migration patterns in four work packages. First, the impact of robot adoption on wages and skills by sector will be studied. Second, the impact of robot adoption in manufacturing industries on migration flows by sectors and skills in selected EU countries will be analysed, also controlling for other factors. Third, the impact of the gap in automation defined by the difference in robot intensity (i.e. robot stocks per employee) between the origin and destination countries on bilateral migration flows will be analysed. Fourth, push and pull factors affecting the intention to migrate will be studied at the individual level.

#### Political economy of public debt, growth and interest rates in the context of the Corona crisis

Anniversary Fund of the Oesterreichische Nationalbank October 2021 - September 2023

The macroeconomic consequences of the Corona crisis have triggered an increase in public debt in the EU's Member States. This research project makes two contributions to a better understanding of the implications for economic policy. First, we develop the first quantitative analysis of the literature concerning the effect of public debt on economic growth. Using the statistical and econometric toolbox of meta-analysis and meta-regression analysis, we investigate whether there is evidence for a threshold effect of the public-debt-to-GDP ratio, whereby economic growth could decline significantly if such a threshold is exceeded. Second, the project develops an analysis of government debt against the background of changes in the interest rate environment. Specifically, we analyse the role of the difference between long-term interest rates on government bonds and GDP growth rates for the dynamics of government debt and fiscal policy.

#### Comparative Advantage in the Digital Era: New insights into trade in digital tasks and ICT capital

Anniversary Fund of the Oesterreichische Nationalbank March 2021 - February 2023

Comparative advantage remains one of the basic principles of international trade theory. This also holds true in times of globalisation and digitalisation. Taking into account the existence of international value chains and productivity differences across countries, this project identifies comparative advantages of EU member states in the 'digital endowments', comprising 'digital tasks' and ICT capital. The project provides new insights into countries' position in 'digital trade' and their readiness to master the shift to cyber-physical production systems that characterise the 'digital revolution'. Furthermore, the underlying institutions and policies that shape these comparative advantages are investigated. This way, the analysis of digital comparative advantage provides valuable insights into what actions may be needed in the EU to defend and improve technological leadership in the digital era.

#### Labour market trajectories of refugees and other migrants

Anniversary Fund of the Oesterreichische Nationalbank January 2021 - December 2022

In view of the large influx of refugees into Austria between 2014 and 2016 and the substantial socio-cultural and economic integration challenges this poses, the project analyses some particular aspects of labour market integration of refugees in Austria. It uses two unique longitudinal databases which provide information on refugee integration over time, namely a newly constructed database provided by Statistics Austria ('Register-based Labour Market data') for the period 2015-2021 as well as five successive survey rounds among refugees in Austria (FIMAS) which have been conducted over the period 2016-2022. It sheds light on refugees' job stability and mobility across different labour market statuses, their home-to-host country occupational trajectories and associated status losses and gains, the impact of public integration programmes on the likelihood of finding employment, and the role of specific stressors and resilience factors for refugees' mental health.

# The EU and Global Production Networks: The Length of Key Value Chains, Trends and Underlying Drivers Joint Research Centre (JRC) January 2021 - June 2022

The world economy as we know it today is the result of developments that started in the 1970s. Growing trade volumes, increasingly sophisticated global value chains (GVCs), and rising levels of foreign direct investment characterize the evolution of the global economy over the last 50 years. Against this background, the proposed project will study the emergence of global value chains and their determinants over time. The project has three main objectives: First, to investigate if global value chains grow or decrease over time, and which GVCs show the strongest expansion or contractions, and measure the length of these value chains; Second, to identify strategic value chains and strategic sectors and trade partners of the European Union within these global value chains; Third, to explain the observed trends in global value chains in terms of the drivers of these changes. The analysis of the project will be based on input-output data and indicators from social networks analysis.

### **Export bonus: Significance and performance of Austrian exporters**

Austrian Ministry for Digital and Economic Affairs October 2021 - April 2022 In view of the importance of the export economy for Austria, in 2009 the Ministry of Economics commissioned that examined the characteristics (e.g. size distributions, productivity) of export enterprises. Due to the already long time horizon since the study has been undertaken - the data used in the study goes back to 2006 - the results are now outdated and it is no longer possible to use them without a certain degree of caution. However, the present study project will not only update these results, it is also intended to provide scope for expanding the factors considered (e.g. including R&D performance, ownership dimension). In addition, the methods used should also be brought up to date and additional data will be included.

#### The Effect of Digitisation on Work in Europe

Anniversary Fund of the Oesterreichische Nationalbank April 2020 - March 2022

The project analyses digitisation and its impact on work from two different perspectives. On the one hand, it not only sheds light on regional digitisation patterns but also examines the effect of digitisation on employment in EU countries at the NUTS-2 level. Methodologically, it goes beyond standard approaches applied in the empirical literature and provides novel insights into regional and industry spillovers as well as non-linearities in the employment effects of digitisation. On the other hand, it explores the effects of digitisation on workers' well-being. It takes an integrated approach and simultaneously determines both positive and negative psychological effects of ICT use, as captured by work engagement and burnout, respectively. It also sheds light on the role of other (job and/or personal) characteristics in either reinforcing or mitigating the positive or negative effects of ICT use on workers' psychological well-being.

## **Determinants and Effects of Foreign Direct Investments in Austria: New Insights from Microdata** *Austrian Ministry for Digital and Economic Affairs*

October 2021 - February 2022

Foreign direct investment (FDI) will play an essential role in the recovery from the Corona crisis and the transformation towards a climate-neutral economy: Economists agree that global climate targets will not be achievable without a substantial increase in FDI flows. On the other hand, there is also growing concern about possible negative effects of FDI, especially in the case of takeovers of Austrian companies by foreign investors. Based on data at the transaction or company level, questions of the causes and effects of FDI in Austria are to be examined. To this end, the study will first estimate or describe the significance of the determinants of FDI commonly found in the literature for those in Austria. In a second part, the effects of these foreign investments for Austria as a business location will be quantitatively examined in terms of variables such as jobs, productivity, innovation, diversity or R&D activities.

#### **Austria's Import Relations: Dependency Analysis**

Austrian Ministry for Digital and Economic Affairs December 2021 - February 2022

Austria's dependencies on imports are analysed at the detailed product level based on UN Comtrade and EU COMEXT data. The analysis of imports is carried out according to the number of partner countries, the respective shares of partner countries in the imports of individual products as well as according to turnover frequency. Products with high import dependency are identified.

#### The production side of 'digitalisation' and its impacts

Anniversary Fund of the Oesterreichische Nationalbank September 2019 - October 2021

The project comprises four main tasks linking the production and use side of the digital sector. In the first task the production and supply side of the ICT goods and services sectors is studied. An overview of the ICT industry across countries is provided based on various data sources at the industry and firm level. Determinants of ICT industries' performance and drivers of investment by ICT superstars across the European Union and the globe are analysed. The second task then focuses on the patterns of trade of ICT goods and services linking the supply side of the digital sector to its demand. Furthermore, the impact of technical regulations and standards embedded within Technical Barriers to Trade (TBT) on patterns of trade flows of ICT goods are analysed. Task three focuses on the investment in ICT capital assets and building up of an ICT capital stock across countries and industries. Gross capital formation and capital stocks in different asset types and their contribution to employment and value added growth will be studied. The fourth task is devoted to the role of patenting in productivity and market share of firms active in the global ICT sectors. Finally, in the last part of task we study whether and how ICT driven technical change impacts

#### New Insights into the Relationship Between Taxation and Trade

Anniversary Fund of the Oesterreichische Nationalbank May 2020 - September 2021

This project deals with two questions from the fields of taxation and international trade. The first one revisits the relationship between labour taxation and international trade, focusing on the role of domestic labour value added. The second one refers to the relationship between corporate taxes and international trade, focusing on the role of the multinational enterprises. The project also assesses whether the decline in labour and corporate taxes from the past decades has contributed to the expansion of international trade. The research project uses industry level data, for EU and OECD countries, and Two Stage Least Squares estimator, to account for potential endogeneity. The project contributes to the recent policy discussion on fiscal devaluation, and the ongoing policy debate on the global minimum corporate income tax.

### Connectivity and interactions between global value chains and foreign direct investment networks

Anniversary Fund of the Oesterreichische Nationalbank May 2020 - July 2021

The research project used a mix of panel data econometric modelling and innovative complex network analysis techniques to study the topological properties, dynamics and interactions between the global value chain and the global foreign direct investment networks at aggregate and sectoral levels. The project analysed the mutual impacts between FDI and GVC participation, analysed the relative importance of countries and sectors from the perspective of multilateral connectivity and relatedness between sectors in general, as well as zoomed in on the digital cluster and economic integration and connectivity dynamics involving the EU and the CESEE countries in policy-oriented case studies. Inter alia the project expanded the country and time coverage of the world input-output database.

## Analysis of value chains in the Western Balkans economies - Enriching potential for regional cooperation in priority areas

Joint Research Centre (JRC) January 2021 - May 2021

The overall objective of this project was to provide guidance, methodological support and capacity building in smart specialisation processes in the Western Balkans economies. One goal of the support to smart specialisation in the region was to identify promising industrial areas (domains) for the Western Balkan economies with higher value-added as well as to analyse and identify possibilities for wider cooperation in the South-East Europe in these identified areas. The analysis of value chains in the Western Balkans (WB) was expected to deliver an advanced contextual overview of the competitive position of the present and potential smart specialisation priority domains, and to identify opportunities for upgrading the position of the whole region and individual economies in European and global value chains; finding new market niches and areas of economic cooperation.

## Migration from Africa, Middle East and EU Eastern Partnership countries towards the EU-27: Challenges and prospects ahead

Anniversary Fund of the Oesterreichische Nationalbank January 2019 - March 2021

Over the last three decades the fall of the Berlin wall and EU enlargement towards the East have been important events which have further nurtured intra EU mobility. Nevertheless, in the coming decade the mobility to the EU will be dominated by another corridor which is directed from South - Africa, Middle East and EU neighbouring countries (AME) - to the North (the EU). The mobility from AME to the EU can be seen as both supply and demand driven. It is supply driven because of underdevelopment of AME with respect to the EU, wars, political and social instability which have afflicted AME regions, but also the impact of climate change and massive displacements of populations especially on the African continent due to hazardous weather conditions. It is demand driven because EU countries are undergoing a strong decline in working age population and will increasingly depend on workers from abroad - including AME countries. As a consequence, there is a great need to better understand potential mobility from AME to the EU, identify its main drivers and what could be the role of migration governance in this context. This project sheds light on determinants of AME-EU mobility, likely future scenarios and on some of the policy challenges.

#### Quality of goods imports: Which role for non-tariff measures?

Anniversary Fund of the Oesterreichische Nationalbank January 2019 - December 2020

One major feature of non-tariff measures (NTMs) is their opacity and complexity of their effects. Regulative standards embedded within NTMs might cause significant trade frictions, while some could stimulate trade due to positive externalities. When NTMs become very trade restrictive and discriminatory, trade disputes may arise. Specifically, when technical NTMs are not improving the quality of the imported product but mostly act as an unnecessary obstacle to trade, the implications of those NTMs might be regarded as protectionism. The study will provide information for trade policy makers to have a better understanding of the current stocks of technical barriers to trade (TBT) and Sanitary and Phytosanitary (SPS) measures and their effects with a focus on quality. In fact, by knowing how these trade policy measures affect quality differently from price and quantity of trade, the study will provide insights on motives behind their implementation.

#### MAP REA trade pillar diagnostic report

Central European Free Trade Agreement (CEFTA) October 2020 - December 2020

The main objective of the research was to support the CEFTA Secretariat to prepare a diagnostic report to analyse the progress and conduct an evaluation of results related to the Multi-annual Action Plan for a Regional Economic Area (MAP REA) in the Western Balkans. The consultancy aimed to provide a fully informed diagnostics of measures along of the trade pillar and their corresponding activities, as well as proposals for an economic development agenda beyond MAP REA. The overall objective of the Action Grant programme was to contribute to enhancing competitiveness of the CEFTA parties by supporting regional economic integration as envisaged in the MAP REA and CEFTA.

#### Importance of Services Trade for the EU Economy and the Impact of Brexit

Anniversary Fund of the Oesterreichische Nationalbank January 2019 - September 2020

Services are a key sector of the global economy, accounting for the bulk of GDP in most countries and for a significant share of global trade. The long history of economic integration created close ties between the UK and rest of the EU that are not so easy to disentangle. In order to estimate the potential costs of Brexit it is important to better understand the interdependency of the EU members' economies with respect to services trade as a rise in services trade cost post-Brexit would impact not only the UK services firms, but also services suppliers and manufacturing producers in the EU. It is likely that some trade diversion will take place both in the UK and the EU, resulting in reallocation of resources to less efficient firms and negative welfare effects. In our study we explored in detail the linkages between the UK and EU-27 economies with respect to services sectors and estimate possible effects of Brexit for both the UK and the remaining EU members.

# Support the RCC Secretariat to prepare a diagnostic report to analyse the progress and conduct an evaluation of results related to the Multi-annual Action Plan for a Regional Economic Area (MAP REA) in the Western Balkans

Regional Cooperation Council (RCC) March 2020 - July 2020

The purpose of the consultancy was to support RCC Secretariat in assessing the results within the Multi-annual Action Plan for a Regional Economic Area (MAP REA) components, namely Investment, Mobility and Digital Integration. The consultancy aimed to provide a fully informed diagnostics of measures along each of the respective components and their corresponding activities, as well as proposals for an economic development agenda beyond MAP REA.

### Effects, opportunity costs and spillovers of EU Cohesion Policy

Anniversary Fund of the Oesterreichische Nationalbank September 2018 - June 2020

This project aimed at contributing to the discussion on the future, post-2020 EU Cohesion Policy (CP). In the past, CP has been the main tool to promote growth and convergence across the EU, thus having positive direct effects on the net recipient countries and also indirect ones on the net payer countries. Still, there is a never-ending debate on the rationale of CP, partly in favour of it, partly doubting its usefulness. The 2021-2027 EU budget funds to be

expected will likely become scarcer, not only because of the Brexit but also because of the emergence of new priorities such as migration and security. In respect of these forthcoming challenges the debate on the effects, opportunity costs and spillovers of CP becomes fundamental. A quantitative estimation permits a more balanced assessment of the costs and benefits of CP for net paying Member States (MS) and a broader view of CP support to EU growth in general. Against this background the project aimed to: a) estimate the effects of CP on regional GDP growth; b) analyse the opportunity costs of CP investments (by investment priorities and geographical distribution); c) analyse the macroeconomic spillovers of CP investments in one country on the development in other EU MS; and d) analyse these spillovers at the regional level.

#### Innovative modeling of non-tariff measures in trade

Anniversary Fund of the Oesterreichische Nationalbank September 2018 - June 2020

Starting in the 1960s, non-tariff measures (NTM) have been continuously replacing tariffs as the core element of trade negotiations. The number of types of non-tariff measures and the number of countries making use of these instruments increases continuously. Therefore, many different approaches have developed recently for the evaluation of NTM and free trade agreements (FTA). Starting from models using simple dummy variables for the indication of NTM or FTA, today there is a wide range of databases available varying in content (i.e. capturing different aspects of NTM and FTA) and in applied methodologies (e.g. extracting information from legal texts, survey data, notifications to the WTO). Our contribution to the existing literature was at least threefold: First, it aimed at modelling non-tariff measures in a Structural Gravity framework. Second, it assessed the value added of different data on the structure of FTA and NTM by means of evaluating their ability to predict the trade effects of the EU-South Korea Free Trade Agreement. The third contribution laid in the estimation of effects of the EU-Japan Economic Partnership Agreement.