

# List of Projects

## Amat Adarov

### **Capacity building for Central, East and Southeast Europe: Joint Vienna Institute**

*Oesterreichische Nationalbank/Austrian Ministry of Finance*

*January 2014 - December 2022*

For more than two decades, wiiw has been organising courses within the framework of the Joint Vienna Institute (JVI). These courses are aimed at decision-makers in the public sector and policy-makers from transition countries in Southeastern Europe and the CIS. wiiw organised six courses in 2022 and was responsible for the entire conception and implementation of these seminars as well as for the selection of the participants.

### **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 studied the emergence of global value chains and their determinants over time. The project had 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 was based on input-output data and indicators from social networks analysis.

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

*Anniversary Fund of the Oesterreichische Nationalbank*

*September 2019 - October 2021*

The project comprised 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 was studied. An overview of the ICT industry across countries was 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 were analysed. The second task then focused 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 were analysed. Task three focused 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 were studied. The fourth task was 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 studied whether and how ICT driven technical change impacts on structure of labour demand by various groupings.

Funded by the [Anniversary Fund of the Oesterreichische Nationalbank](#) (Project No. 18128).

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

*Anniversary Fund of the Oesterreichische Nationalbank*

*May 2020 - September 2021*

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

Funded by the [Anniversary Fund of the Oesterreichische Nationalbank](#) (Project No. 18310).

### **Connectivity and interactions between global value chains and foreign direct investment networks** (*wiiw Team Leader*)

*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.

### **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.

### **Capital dynamics, global value chains and competitiveness (CaDoVaC)**

*Joint Research Centre (JRC)  
October 2018 - April 2020*

The research project analyses the interaction between capital accumulation and FDI on the one hand, and global value chains, trade and productivity patterns - on the other. The analysis is carried out at the international level comparing the EU with the US, China and Japan, as well as at the national and industry levels focusing on the developments within the EU. The project aims to cast light on important dimensions of EU competitiveness concerning the implications of capital formation and allocation as a driver of global value chains, the role of capital composition in productivity dynamics, as well as obstacles for efficient capital allocation.

### **Framework contract: Evaluations and impact assessments of EU macro-financial assistance and balance of payment support operations** (*wiiw Team Leader*)

*European Commission, DG Economic and Financial Affairs  
January 2016 - December 2019*

European Commission, DG Economic and Financial Affairs established a multiple framework service contracts that allows it to obtain evaluation services and impact assessments of its own activities. Under this Framework Contract, the consortium partners assess the relevance, effectiveness, efficiency, utility, sustainability, coherence, European

Union Added Value, and governance of the macro-financial assistance and balance of payment support operations granted by the EU and the IMF to third countries. wiiw is part of a consortium under the leadership of Ecorys.

### **Industry level growth and productivity data with special focus on intangible assets (EUKLEMS update)**

*European Commission, DG Economic and Financial Affairs*

*July 2018 - October 2019*

Within this project, wiiw created a comprehensive set of reliable data for productivity measures and growth accounting. The work went in various aspects beyond the data that were officially available at this time, notably regarding the length of time series, the consistent application of industry and asset breakdowns, the quality adjustment of labour input measures and the respective attribution of wage shares, estimations of investments, consumption of fixed capital and capital stock. The strong need for such a database has long been recognised and underlies the development of the EU KLEMS project, which was successfully concluded in 2009 as an FP6-funded research project. Within this service contract, wiiw updated the existing EU KLEMS database, extended it by an additional set of information on intangible assets, explored ways to integrate these measures into the growth accounting framework and provided results of such an exercise, distinguishing a statistical from an analytical module. Moreover, wiiw provided an analytical paper identifying the most important recent trends of the productivity dynamics in Europe and its determinants, with a particular focus on the role of intangible assets. The dataset has been published on a dedicated website ([www.euklems.eu](http://www.euklems.eu)) in October 2019.

<https://www.euklems.eu>

### **Implications of Financial Cycles for Europe's Economic Growth and Its Sustainability (wiiw Team Leader)**

*Anniversary Fund of the Oesterreichische Nationalbank*

*August 2016 - July 2018*

In this research project we examined the potentially changing nature of global economic development by focusing on the implications of cyclical movements in financial markets for economic growth and its sustainability. Based on historical data characterising financial market segments of advanced and developing economies we identified financial cycles and explored three channels through which they affect economic growth: 1) cross-country macroeconomic spillovers arising from financial shocks and their synchronisation; 2) interaction between financial cycles and macroeconomic imbalances; 3) the dynamics of output gaps and potential output levels taking financial cycles into account. As an overarching theme, we explicitly tracked implications for economic growth in Europe, the relative merits of bank-based and market-based financial systems, and the role of global economic interconnectedness - issues of significant policy relevance both currently and in the years to come.

### **Eurasian Economic Integration: Impact Evaluation and Review of Prospects (wiiw Team Leader)**

*Anniversary Fund of the Oesterreichische Nationalbank*

*January 2017 - June 2018*

In the proposed research project we will examine the economic impact of Eurasian integration by focusing on trade creation and trade diversion effects at aggregate and industry levels vis-à-vis the members of the Eurasian Economic Union and non-bloc trading partners using the gravity model of trade and the synthetic counterfactual methods. In the light of the empirical results the project will also revisit the trade potential, challenges and possible routes of economic integration on the wider 'pan-European-Eurasian economic space' in the contexts of the EU and the EU Neighbourhood policy, the Eurasian Economic Union, and the New Silk Road initiatives.

### **Competitiveness drivers and obstacles, intra-EU linkages and European value chains in GVCs**

*European Commission, DG Grow*

*January 2017 - January 2018*

The emergence of international value chains (VCs) and the implied cross-border production sharing between countries has dramatically altered the international trading system. In view of the joint cross-border production processes numerous products would deserve the designation of origin 'Made in the World', as suggested by the WTO initiative of the same name - although in general there is the perception that international value chains are predominantly regional in scope. Since the Great Recession, however, there are concerns that the trend towards geographically-dispersed production has come to a halt with, among other factors, re-shoring initiatives and protectionist tendencies. Against this background this report analyses some of the key issues related to international VCs with data from the World Input-Output Database (Release 2016) which covers the period 2010-2014. Based to a large extent on a measure of international value chain (VC) trade termed re-exported domestic value added, which comprises exports of intermediates that cross international borders at least twice, the question

whether the world has reached 'peak value chain trade' and to what extent VCs have contributed to the decline in the income elasticity of trade is addressed. The research also re-examines whether value chains are predominantly global or regional in scope both worldwide and at the EU level. Furthermore, the extent of regional VC integration across the major regional trading blocs is compared. Finally, some of the implications of value chain trade for structural change and competitiveness are investigated.

### **Diagnostic Report for Partner Country Programme (PCP) Kyrgyzstan**

*UNIDO*

*August 2017 - November 2017*

At the moment, Kyrgyzstan's manufacturing sector is dominated by gold production, creating only a limited number of jobs but putting a heavy burden on the natural environment. Meanwhile, strong and inclusive growth, which would be consistent with the country's long-term objectives (such as those envisaged in the "40 steps to the New Era" government programme) and the UN Sustainable Development Goals, would require a stronger emphasis on manufacturing industries such as food and beverages, textiles, and wearing apparel. Their labour-intensive production processes and strong linkages with other sectors, particularly agriculture, could generate badly needed formal jobs and make the country less dependent on the informal sector and the inflow of remittances from abroad. Kyrgyzstan's inexpensive, trainable labour as well as low energy costs are internationally competitive, and represent clear advantages for the growth of such industries. However, these advantages are offset by the low productivity of firms, which tend to be too small and fragmented to reach a productivity level required to compete internationally and still suffer from insufficient access to credit. Besides, the country suffers from major logistical problems for trade, which were found to be greater than in other landlocked countries at a similar development level, such as Moldova and Laos.

### **Challenges and implications of the DCFTA agreements between the EU and Georgia, Republic of Moldova and Ukraine** *(wiiw Team Leader)*

*Bertelsmann Stiftung*

*July 2016 - September 2017*

In a joint research project of the Bertelsmann Stiftung and the Vienna Institute for International Economic Studies A. Adarov and P. Havlik analysed the benefits and costs of the DCFTAs between the EU and Georgia, Moldova and Ukraine and proposed recommendations for the European Neighbourhood Policy. The analysis suggests that the net benefits are highly asymmetric along the time dimension (high costs in the short and medium run - benefits accruing mostly in the longer run), as well as across regions and economic sectors (less competitive sectors and regions will face particularly onerous adjustment costs). In the light of the macroeconomic and geopolitical challenges the DCFTA countries have been facing, this may jeopardise progress of reforms.

### **The evolving composition of intra-EU trade over time**

*European Commission, DG Grow*

*January 2016 - July 2016*

Global trade in goods and services was severely hit by the economic crisis in 2008, which initiated a pronounced but short-lived trade collapse. Until 2011 trade flows recovered relatively quickly, but since then global trade in goods has been rather anaemic. This development is partly the result of the low dynamics of EU-related trade which accounts for a large share of global trade flows. Regarding intra-EU trade a strong increase in overall bilateral trade intensities is observed. The process of EU integration before the crisis and differentiated growth patterns of goods and services exports implied that exporting activities became slightly less concentrated across EU Member States. However, specialisation dynamics implied an increasing geographic clustering and specialisation of goods and services exports across Europe. These changes in the geographical patterns of intra-EU trade activities were mostly driven by changes in the patterns of trade in the medium-quality segment which can be interpreted as a 'climbing up' phenomenon of less advanced countries. Results from a gravity framework suggest a structural break of these trends after the crisis. Another aspect of the increasing trade intensity is the role and magnitudes of intra-firm trade and potential determinants thereof. However, research on this is hampered by a severe lack of data and only a few insights can be gained, mostly for extra-EU trade. Results based on foreign affiliates' trade statistics (FATS) data indicate that intra-firm trade flows were responsible for more than half of total trade between the EU and the US in 2012. Results also suggest that intra-firm trade has been more resilient to the trade crisis despite the more difficult global environment for foreign direct investment and export activities. Based on a gravity approach, overall EU intra-firm trade is estimated to be lower, though these results need to be interpreted with caution. In a case study based on Irish firm-level data it is shown that intra-firm trade accounts for 30% of exports and 25% of imports.

## **How to Stabilize the Economy of Ukraine and Put it on a Sustainable Growth Trajectory**

*United Europe e.V.*

*December 2014 - June 2015*

On behalf of United Europe and Bertelsmann Stiftung, wiiw explored the possible ways how to stabilise the Ukrainian economy and analysed the economic effects of the Russia-Ukraine conflict. To that end, wiiw analysed the macroeconomic developments, foreign trade and FDI relations, as well as industrial and regional patterns. The study was presented jointly with the clients, representatives of the EU Commission (Commissioner J. Hahn) and of the Ukrainian parliament in the framework of a Policy Dialogue in Brussels. A similar presentation in Kyiv also generated considerable attention among international as well as Ukrainian media and policy-makers. The study was furthermore supported by the Austrian Central Bank (OeNB), Bertelsmann Stiftung, DER-think tank, ING Bank NV, Porsche Holding Gesellschaft m.b.H and Raiffeisen Bank International AG.