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

### **List of Projects**

#### Sandra M. Leitner

#### Global Strategy for Skills, Migration, and Development (GS4S)

European Commission, Horizon Europe January 2024 - December 2026

In light of EU challenges relating to an aging workforce and the energy transition, the EU faces a shortage of relevant skills. The Horizon Europe project GS4S seeks to better understand global skills shortages in selected sectors (Digital, Care and Construction) and aims at strengthening evidence-based policies through new evidence on various overlooked global mobility schemes. It thereby focuses on skilled (migrant) workers' experiences with skilling, upskilling and reskilling in EU and non-EU regional contexts. By using mixed-methods research, the project looks to provide exploitable datasets and practical tools for policy makers, businesses, and educational institutions in the EU and non-EU countries towards improved matching of skills, to address labour market needs and to eventually contribute a socially sustainable (well-being oriented) global strategy for skills, migration and development. As part of an interdisciplinary consortium led by Stichting Radboud Universiteit in Nijmegen, wiiw collaborates with partners in Belgium, Estonia, Italy, Netherlands, Switzerland, Egypt, Nigeria and Bangladesh.

# **EU-Asia relations: technological competition and trade policies in an era of regionalisation**Anniversary Fund of the Oesterreichische Nationalbank June 2023 - May 2026

This project analyses various aspects of EU-Asia relationships (with a focus on East and Southeast Asia; E-SE Asia). It addresses two main aspects which characterise current global economic developments: a tendency towards competing regional integration ('regionalisation') and fiercer technological competition. It analyses intra- and interregional research collaborations of firms, the positioning of EU and E-SE Asian countries in terms of the functional specialisation of global value chains, technology spillovers from eMNCs (multinationals from emerging E-SE Asian economies) and aMNCs (multinationals from advanced economies) to domestic EU firms, the roles of competing trade policy arrangements and technological complementarity in regional vs. inter-regional integration processes, the impact of different trade policy designs on trade structures in the context of industry-specific technology catching-up and leap-frogging, and global and regional competition between regulatory standards.

Funded by the Anniversary Fund of the Oesterreichische Nationalbank (Project No. 18833).

# Towards the European Web Intelligence Hub - European system for collection and analysis of online job advertisement data (WIH-OJA) (wiiw Team Leader)

**CEDEFOP** 

October 2021 - November 2025

The project is a continuation of the four-year project on 'Real-time Labour Market Information on Skill Requirements: Setting up the EU System for Online Vacancy Analysis' which explored online job-advertisements (OJAs) as a new source of real-time Labour Market Information to shed light on the changing skills demand in different sectors and occupations in the 28 EU Member States (see https://www.cedefop.europa.eu/en/tools/skills-online-vacancies). In the course of the project, labour market experts from 32 countries of the Union - with a labour market expert from wiiw as country expert for Austria - provide an update of the structure of the online job-portal markets and the extent to which online job-portals are used in recruitment and job-search as well as knowledge of the labour market in general.

### Advice on intra-EU mobility and social security coordination (Lot 2: Statistics and data collection) (wiiw

Team Leader)

 $European\ Commission,\ DG\ Employment,\ Social\ Affairs\ and\ Inclusion$ 

December 2021 - November 2025

The European Commission is seeking independent expertise in order to have support in the areas of free movement of workers, posting of workers and social security coordination with in-depth research and analysis, as well as to widely disseminate this specific expertise to experts and practitioners at the national level. wiiw is part of a consortium led by HIVA/KU Leuven and is responsible for several ad-hoc reports on specific indicators to mobility.

### Towards a world integrated and Socio-economically balanced European economic development scenario (TWIN SEEDS)

European Commission, Horizon Europe October 2022 - September 2025

The objective of the TWIN SEEDS project is to investigate changes in international trade and production patterns, specifically in global value chains (GVCs), both those of a longer-term nature (driven by the "twin seeds": technological developments and geo-political changes) and those that are taking place in the wake of the Covid-19 pandemic. The project will examine the impacts of these changes on employment, job quality, social and regional cohesion, on patterns of growth and competitiveness, as well as their environmental implications. The analysis will provide the basis to map out forward-looking policy scenarios (including trade and investment, industrial, regional, education/training and social policies) that allow Europe to secure decent work and working conditions, rapid progress towards resource-efficiency and decarbonisation, security of supply for strategic goods and sustainable, inclusive and competitive growth in the years to come. The research will be based on a thorough multi-level (global, national, regional, sectoral, firm level) research framework, relying on a mix of quantitative and qualitative methods, on multidisciplinary knowledge (international economists and trade policy experts, regional economists, international business and organisational experts, political scientists) and on an extensive stakeholder engagement.

### Welfare systems and labour market policies for economic and social resilience in Europe (WeLaR) (wiiw Team Leader)

European Commission, Horizon Europe September 2022 - August 2025

WeLaR is a three-year research project funded by the Horizon Europe Framework Programme that aims to examine the impact of digitalisation, globalisation, climate change and demographic shifts on labour markets and welfare states in Europe. WeLaR will not only improve the understanding of the individual and combined effects of these trends, but also offer policy proposals helping to adapt welfare systems to these pressing challenges. The project's ultimate goal is to assist in the creation of policies that ensure economic growth is distributed fairly across society and generates opportunities for all. To achieve these goals, the WeLaR team will develop a new framework to study the effects of the four megatrends on the labour market and the welfare state. It will integrate analysis of their impacts on labour supply, demand and market matching, while accounting for the interactions among the four megatrends and the mediating role of institutions and policies. WeLaR will use a mix of quantitative and qualitative methods, as well as stakeholder engagement. The research is carried on by a consortium of 10 institutions from seven European countries and is being coordinated by the Katholieke Universiteit Leuven (KU Leuven). wiiw's contributions address primarily intra-family time allocation of paid work and housework, atypical work and intra-EU mobility patterns, the impact of offshoring and automation on the demand for typical and atypical jobs, and the role of unions and policies for the quality of work.

https://projectwelar.eu/

## Untangling the impacts of technological transformations, globalisation and demographic change to foster shared prosperity in Europe (UNTANGLED)

European Commission, Horizon 2020

February 2021 - January 2024

Technological transformations, globalisation and demographic changes are the three key mega-trends posing socio-economic challenges and opportunities for the EU. UNTANGLED aims to fill knowledge gaps about these trends by pursuing three main goals: (1) to provide detailed analyses at the macro-, regional-, sectoral-, and micro-level concerning the effects of these trends on labour market outcomes and inequality, and their winners and losers; (2) to develop comprehensive, model-based scenarios of the impacts of these trends in the next decades, overall and for various subpopulations, sectors and regions; (3) to develop policy recommendations fostering shared prosperity. The

project is commissioned to a consortium coordinated by the Catholic University of Leuven. wiiw is one of 14 partners and leads a workpackage on meso-level analysis.

#### Entwicklung, Organisation, Durchführung und Evaluierung von Seminaren am Joint Vienna Institut (JVI)

 $Oester reichische\ Nationalbank/Austrian\ Ministry\ of\ Finance$ 

January 2023 - December 2023

Das wiiw hat im Rahmen des Joint Vienna Institute (JVI) mehrere Kurse konzipiert und durchgeführt. Diese Kurse richten sich an Entscheidungsträger des öffentlichen Sektors aus den Transformationsländern Südosteuropas und der GUS und haben zum Ziel, aktuelle wirtschaftspolitische Themen zu vermitteln.

#### Long-term impacts of the Covid-19 pandemic on labour market integration of refugees (FIMAS reCOV)

 $International\ Centre\ for\ Migration\ Policy\ Development\ (ICMPD)$ 

March 2023 - December 2023

FIMAS reCOV is the sixth wave of the Austrian longitudinal study on integration processes of refugees and beneficiaries of subsidiary protection from Syria, Afghanistan, Iraq and Iran in Austria. Its core focus is on labour market integration, but also on the interactions with other integration domains such as social and cultural integration, educational integration, residential integration, integration into the health and other areas of the welfare system, which favour or hinder labour market integration. The project FIMAS reCOV follows up our longitudinal analysis by focussing on the impact of the Covid-crisis with its different phases (lockdowns, recoveries) on integration processes and labour market experiences of the different sub-groups of refugees (differentiated by age, gender, educational attainment, country of origin) and identifies the particular challenges they face. The envisaged overall sample includes over 2,700 respondents of which about a third has also participated in at least one of the previous five FIMAS waves. FIMAS reCOV builds on and continues the previous five surveys FIMAS, FIMAS+INTEGRATION, FIMAS+INTEGRATION<sup>2</sup>, FIMAS+YOUTH and FIMAS+Frauen.

#### Jobs, mental health and social policy in times of COVID-19

FWF - Austrian Science Fund November 2021 - October 2023

In this project, a research team at wiiw is investigating important structural and distributional social impacts of the COVID-19 pandemic. In addition to the impact of the crisis on different economic sectors and on their organisation, the topics of employment and re-employment as well as the perspectives of different social groups are taken into account. For this purpose, a model is developed that captures the main features of the social and structural impacts in the medium and long term ('agent-based stock-flow consistent model'). Besides factors of labour market economics, it also includes changes in technology, productivity and work organisation as well as economic policy decisions. Four empirical studies shed light on important components of the theoretical model. These include structural developments of economic activities, different employment models, homeworking and effects on mental health, analysis of government measures.

#### Labour market trajectories of refugees and other migrants (wiw Team Leader)

Anniversary Fund of the Oesterreichische Nationalbank January 2021 - June 2023

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.

# Framework contract for studies in the field of Social Policy, Education, Employment, Research, Culture and Digital Single Market (Lot 1 - Social and Employment Policy)

Committee of the Regions July 2022 - June 2023 The purpose of this framework contract is to enhance the European Committee of the Regions' capacity to provide input into the policy-making process by a) increasing its rapid response capability, b) allowing a broader consultation of local and regional players, c) offering the possibility of drawing up specific opinions on topics of current interest, d) making databases and knowledge built up by research centres and universities accessible for the evaluation of policies, e) improve its capacity to prepare outlook opinions in the context of the Cooperation Protocol with the European Commission, f) use Territorial Impact Assessments as valuable tools for complementing Commission ex ante impact assessments and g) strengthen the capacity and increase the activity in foresight analysis of regional and local developments. The framework contract focuses on social and employment policies that will be addressed from the perspective of local and regional authorities. wiiw is leading a consortium with Spatial Foresight and t33.

#### Functional division of labour in EU value chains

Hans Böckler Stiftung January 2022 - December 2022

The emergence of global value chains has radically changed the organisation of production in the EU economy. In particular, the increasingly fine-grained international division of labour has made it possible for countries to specialise in individual business functions of the value chain and thereby generate higher value added. This project examined the causes and effects of these "functional specialisation patterns" on the labour market, particularly on wage developments and working conditions. The project combined two existing methods for the analysis of functional specialisations in order to ensure the reliability of results. The determinants and implications of functional specialisation on the labour markets in European countries and regions have been analysed using, inter alia, cluster analyses, panel regression methods and binary choice models. Ultimately, the questions to be answered by this study were: Why do some countries become locations for corporate headquarters and research laboratories, while others end up as "extended workbenches" within the European division of labour? What are the effects of these "functional specialisations" for labour markets in Europe?

#### **Danube Region Monitor - People and Skills**

Austrian Agency for Education and Internationalisation (OeAD) and L&R Sozialforschung April 2021 - November 2022

The Danube Region Monitor was initiated in 2017 to highlight key developments in the areas of labour markets and education systems in the fourteen countries participating in the European Union Strategy for the Danube Region (EUSDR). This annual flagship report serves as a basis for evidence-based policy decisions in these countries and within the framework of the EUSDR. wiiw's main task is to revise and update the report for the years 2021 and 2022 and to ensure that the underlying statistics are relevant, reliable and comparable across the countries concerned. https://peopleandskills.danube-region.eu/

#### Processes of labour market integration of female refugees in Austria (FIMAS+Frauen)

International Centre for Migration Policy Development (ICMPD) February 2022 - September 2022

FIMAS+Frauen is the fifth wave of the Austrian longitudinal study on integration processes of refugees and beneficiaries of subsidiary protection from Syria, Afghanistan, Iraq and Iran in Austria. Its core focus is on labour market integration, but also on the interactions with other integration domains such as social and cultural integration, educational integration, residential integration, integration into the health and other areas of the welfare system, which favour or hinder labour market integration. The project FIMAS+Frauen focusses on female refugees and their integration processes and experiences and identifies the particular challenges they face. The overall sample includes over 2,800 respondents of which a quarter has also participated in at least one of the previous four FIMAS waves. FIMAS+Frauen builds on and continues the previous four surveys FIMAS, FIMAS+INTEGRATION, FIMAS+INTEGRATION<sup>2</sup>, and FIMAS+YOUTH.

#### The Effect of Digitisation on Work in Europe (wiiw Team Leader)

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.

#### 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).

#### Migration and Human Capital in the Western Balkans

European Training Foundation (ETF) December 2019 - October 2021

The project looks at migration dynamics from a human capital perspective in the six Western Balkan countries which have experienced high and persistent emigration since the 1990s and, since the early 2000s, increasingly more skilled emigration. It studies the interrelationship between migration flows (with a specific attention to skilled migration), human capital formation and utilisation (linked to labour market dynamics). It aims to understand the causes of the extremely high outflows of labour (and skilled labour in particular) from the region as well as their effects, taking into account the absorptive capacity of local labour markets, possible mismatches between local educational and training structures and labour market needs and other economic and institutional contexts of the countries. It also examines how, for different scenarios, the continuation of migration trends could influence the skills pool and its utilisation in the future. The focus of the analysis is on the post-2010 period, with projections until 2030. In the course of the project, a novel cohort-based approach has been developed and applied to estimate the extent and skill composition of net-migration, which is unavailable from official home-based migration statistics for the six Western Balkan countries. The project's output will include country fiches for each of the six WB countries with detailed policy recommendations, a regional synthetic report, and a number of quantitative statistical and econometric papers.

#### Processes of labour market integration of young refugees in Austria (FIMAS+YOUTH)

International Centre for Migration Policy Development (ICMPD) January 2021 - September 2021

Building on the surveys FIMAS, FIMAS+INTEGRATION and FIMAS+INTEGRATION<sup>2</sup>, the project FIMAS+YOUTH represents the fourth wave of the Austrian longitudinal study on the integration processes of refugees. Generally, the FIMAS project series aims to shed light on the integration processes of refugees and beneficiaries of subsidiary protection from Syria, Afghanistan, Iraq and Iran in Austria by following them dynamically over time. Its core focus is on labour market integration as well as its interaction with other integration domains (i.e. social integration, educational integration, residential integration, etc.) that favour or hinder labour market integration. The project FIMAS+YOUTH focusses on young refugees, aged 15 to 25, and their integration processes and experiences. The overall sample comprises over 2,700 respondents of which a quarter has also participated in at least one of the previous three FIMAS waves. In addition to a comprehensive project report on the integration experiences of young refugees based on the fourth wave, we conducted a first analysis exploiting the panel dimension of the FIMAS dataset. The timing of the FIMAS+YOUTH survey allowed us to analyse specifically how the COVID-19 crisis impacted on different aspects of labour market integration of refugees in Austria. We found a rather strong negative

impact of the crisis on refugees with high levels of education and on women, while other groups of refugees managed to benefit from the opening up of opportunities in specific segments of the labour market (such as food and parcel delivery, etc.)

#### 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.

#### ArBeEi International - Grundlagen- und angewandte Arbeitsmarktanalysen

Federal Ministry of Labour, Social Affairs and Consumer Protection (BMASGK) July 2017 - June 2020

Der Prozess der Globalisierung sowie die zunehmende Integration Europas stellen den Arbeitsmarkt in Österreich vor große Herausforderungen. Zunehmende wirtschaftliche Verflechtungen (v.a. über Handel, Direktinvestitionen, Offshoring, Migration) haben erhebliche Auswirkungen auf die Bedingungen am Arbeitsmarkt, auf Lohn- und Einkommensentwicklungen und Beschäftigungsstrukturen. Evidenzbasierte Handlungsempfehlungen für die Wirtschaftspolitik im Allgemeinen und die Arbeitsmarktpolitik im Besonderen erfordern daher eine Analyse mit einer internationalen und vergleichenden Perspektive. Für Österreich bedeutet das, die arbeitsmarktrelevanten Entwicklungen seiner Nachbarländer, v.a. der mittel- und osteuropäischen Nachbarn, der Beitrittskandidaten und der EU Nachbarregionen genau zu analysieren, und natürlich auch eine globale Perspektive zu entwickeln. Dieses vom österreichischen Sozialministerium beauftragte Forschungsprojekt beschäftigt sich mit diesen Themen. Es ist auf drei Jahre angelegt und in vier Teilbereiche gegliedert: (1) Technologie, Globalisierung und Konvergenz in der EU, (2) Mobilität von Arbeitskräften und Migrationstrends, (3) Konjunktur, Beschäftigung und Arbeitslosigkeit und (4) institutionelle Rahmenbedingungen und deren Effekte auf Wachstum, Beschäftigung und Ungleichheit.

#### Impact Assessment study on the Revision of Machinery Directive

European Commission, DG Grow January 2019 - April 2020

The Machinery Directive is the core European legislation for placing on the market products of the mechanical engineering industries. Products covered range from lawn movers to 3D printers, from electrically powered hand-tools to construction machinery, from commercial service robots to complete automated production lines. The study looks whether there is need for specific improvements and specifications of the Directive and whether the Directive is conducive to innovation in digitalisation, Internet of Things, Artificial Intelligence, the new generation of autonomous robots and cybersecurity. The role of wiiw is to provide an economic and market analysis of the machinery sector in Europe and to compare it to that of its major competitor countries.

#### **SEE Jobs Gateway**

The World Bank July 2016 - March 2020

Within this project, an annual flagship report on *Western Balkans Labor Market Trends* is launched. The Report is based on a dedicated regional labour market database for the Western Balkans, established and compiled by wiiw in cooperation with the Statistical Offices of the region. It allows, for the first time, to calculate aggregate labour market indicators across the six Western Balkan countries and to directly compare them with each other and with selected EU peer countries. The reports and database are available on the wiiw website. Overall, the initiative aims to provide access to labour market information and data for national policy-makers in the Western Balkans, as well as the international and academic communities. At the same time, it aims to generate interest among the press, NGOs and the wider public and thereby to encourage the debate on labour market policies.

## DG ECFIN Fellowship-Initiative 2018-2019 - The productivity challenge: jobs and incomes in the dawning era of intelligent robots

European Commission, DG Economic and Financial Affairs October 2018 - June 2019

Two important but conflicting longer-term trends can currently be observed: On the one hand - at least in some publications - the emergence of new technologies is expected to have a strong negative impact on employment in individual countries. On the other hand, there is a demographic development in the European countries (especially in Eastern Europe), which in the medium to long term indicates a decline in the total population and an even stronger decline in the working age population and thus a sharp decline in the labour supply. Against this background, the potential employment effects of new technologies are examined, particularly with regard to their labour-saving effects, and confronted with current demographic trends. As a further step, it is analysed to what extent the new technologies have the potential to increase labour productivity so that the potential labour shortage can be compensated.

#### Integration of recent refugees and third country nationals into the Austrian labour market

Anniversary Fund of the Oesterreichische Nationalbank October 2016 - June 2019

The aim of this project was to investigate the opportunities and challenges of integrating refugees and migrants in the Austrian labour market. A particular focus of the analysis was to follow the dynamics of labour market integration, building on a variety of longitudinal databases, including our own survey (FIMAS) covering recent refugees/asylum seekers as well as register-based labour market career data from Statistics Austria. The aim was to follow the experiences of different groups of refugees and migrants coming from different countries of origin with their specific personal characteristics, social contexts and participations in various policy programmes. Analytically, labour market integration was analysed along a number of different dimensions of integration (such as social network formation, cultural integration, integration into the health and other aspects of the welfare system, training and educational integration, etc) to check how these interact to facilitate or hinder labour market integration. An important part of the project addressed the vulnerability of refugees to mental health problems and identified the effect of stressors and resilience factors on their mental health situation. Various state-of-the-art statistical methods were applied to analyse the heterogeneity of experiences, effectiveness of policy programmes and interaction between different dimensions of integration.

#### **Migration and Globalisation - Impacts and Interaction**

Anniversary Fund of the Oesterreichische Nationalbank March 2016 - March 2018

This project contributes to the current debate on the effects of immigration by considering how migration impacts upon and interacts with other forces of globalisation. The project will largely focus on the EU-27 countries, examining the impact of intra-EU and extra-EU migration flows on trade, FDI and off-shoring. The project will focus on four major issues, namely: (i) the impact of immigration on (North-South) FDI flows; (ii) the relationship between migration and services trade flows; (iii) the interactions between migration, trade and FDI flows; (iv) migration and offshoring and their impact upon labour markets and inequality in EU economies.

#### **Investigating the Impact of the Innovation Union (I3U)** (wiiw Team Leader)

European Commission, Horizon 2020 March 2015 - February 2018

Innovation has been placed at the heart of the Europe 2020 strategy aimed at coping with major structural changes, the increase of global competition and the current crisis, and at tackling major societal challenges such as climate change, energy and resource scarcity, health and ageing. The Innovation Union has the main objective to strengthen the European innovative potential; it sets 13 general objectives and 34 specific (policy) commitments associated with the objectives, aimed at stimulating innovation. The objective of this project is to deliver a system of assessment for the commitments. The approach starts from the evaluation of the state of achievement of the individual commitments, but puts crucial emphasis on their effects on the innovation system as a whole, as well as on the economy-wide effects of innovation. The basic idea is to retrace the entire chain of effects of the commitments, from their implementation to their final impact in terms of competitiveness, growth and employment. wiiw is responsible for the evaluation of seven IU committments having been agreed in the areas of EU patents, eco-

innovation, social and territorial cohesion, social innovation, innovation partnerships and international talents. http://www.i3u-innovationunion.eu

#### 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.

#### Über die Wirkungen von Freihandel - Eine Bestandsaufnahme der ökonomischen Literatur

Federation of Austrian Industries

Iune 2017 - November 2017

The discussions about globalisation, and free trade in particular, have gained momentum in recent years. For a comprehensive and rational debate about the mechanisms and effects of free trade, an analysis based on theoretical arguments and empirical facts is needed. The related topics encompass the effects of trade on real income, inequality, employment, macroeconomic outcomes and the way free trade is governed. This contribution summarises the most important theoretical arguments concerning these topics and confronts them with recent empirical research results.

#### Falling Behind and Catching Up in Southeast Europe (GDN)

Oesterreichische Nationalbank/Austrian Ministry of Finance January 2014 - May 2017

Southeast Europe holds a long record of being one of Europe's least developed regions. Sporadic growth spurts are regularly followed by strong fall-backs. Neither firms, nor banks or states were able to make broad industrialization happen in a sustainable way. The proposed research analysed the determinants and effects of backwardness in Southeast Europe. The analysis included inter alia issues of long-run development, industrialization, infrastructure,

the role of cities, migration, state building and financial crisis. The results yielded important policy recommendations.

#### **Global Development Network Southeast Europe (GDN SEE)**

Oesterreichische Nationalbank/Austrian Ministry of Finance February 2009 - July 2016

wiiw acts as regional hub for SEE within the Global Development Network (GDN) in providing capacity building for research and policy advice in the areas of labour markets, migration, trade, etc. wiiw initiated several research competitions in the region and also performs own research in this context. The topics of the most recent project phase were labour market developments, inequality, migration and fiscal systems in SEE. <a href="http://balkan-observatory.net">http://balkan-observatory.net</a>

#### 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.

### Innovation in the CESEE region: from pre-crisis credit boom to the effects of the financial crisis (wiiw Team Leader)

Anniversary Fund of the Oesterreichische Nationalbank July 2014 - December 2015

In Europe's Emerging Market Economies a change in the underlying growth and catching-up model of the last decades is becoming apparent. The proposed study was one of very few studies on developing and emerging economies in Central, East and Southeast Europe (CESEE) focusing on innovation activity in this region. It analysed drivers and effects of innovative activities at the firm level for a comprehensive set of countries in the CESEE region. The study looks at three phases of economic and financial development, namely 'financial normalcy' (2000-04), the emergence of the credit and housing 'bubble' (2004-08) and the 'crisis' (from 2008 onwards) and at two innovation strategies (make and buy) and analyses the role of (i) credit constraints as an impediment to innovation activities and success, of (ii) foreign-controlled enterprises and their potentially superior innovation and firm performance and of (iii) the strategic choice of R&D cooperation partners for innovation success.

#### Industrial competitiveness and market performance (ECSIP)

European Commission, DG Grow April 2012 - December 2015

The individual studies of this framework contract provide an input to the assessment of existing and the formulation of future EU industrial and related policies as well as monitoring industrial performance. Typically, the unit of analysis is the individual industry or, as appropriate, groups of related industries. It also includes the value chain(s) in which the industry is embedded, an assessment of a particular (industrial) policy initiative and its impact on the competitiveness of the industry in question. The emphasis of the studies is on the structural and microeconomic

factors affecting and reflecting competitiveness and market performance of an industry. Macroeconomic analysis, econometric analysis and modelling may complement the investigation. wiiw was involved in three of these studies: ,The luxury industry in Europe','The role of firm innovation and the impact of that decision on the location of innovation', and 'The relation between industry and services in terms of productivity and value creation'. In the latter one, wiiw also had the coordinator role.

http://www.sectorcompetitiveness.com/

#### Recent patterns of labour mobility in the European Union

Anniversary Fund of the Oesterreichische Nationalbank July 2013 - March 2015

In the EU the level of labour mobility is comparably low, but rising due to intensified labour market flexibility and increasing migration flows. The project analysed changing patterns of labour mobility in a detailed manner in the countries, regions and economic sectors of the EU by applying a descriptive and an econometric approach. A specific focus was put on whether international migrants respond more flexibly to labour market demands. Moreover, the effects of external shocks during the financial and economic crisis on the scale and structure of labour mobility was analysed. The project drew on two micro-datasets: the EU labour force survey for performing a worker flow analysis and the MICRO-DYN database, which provides data based on EU-wide firm-level data to perform a job flow analysis. In the econometric approach we applied regional, country, sectoral and workers characteristics to detect the reasons for differences in the European wide map of labour mobility.

#### The future development of EU industry in a global context

European Commission, DG Enterprise and Industry December 2014 - March 2015

The objective of this study was to assess the future development of EU exports. By applying advanced econometric techniques, the future development of export performance of manufacturing and services sectors have been examined under various assumptions. In particular, the study aimed to identify future strengths and weaknesses in EU exports, in order to derive policy recommendations for Member States and EU institutions. Results of this exercise have been used to assess future developments of sectors classified by technological intensity, value added intensity, and growth impacts as well as other measures.

#### **Competitiveness of the European Economy**

European Investment Bank (EIB) June 2014 - February 2015

The objective of this study was to provide a snapshot of current competitiveness of the EU and its member economies, as well as the evolution of their competitiveness over time. Competitiveness comparisons with the US, Japan, China and other emerging market economies are of interest. To the extent possible, services as well as manufacturing were discussed. The empirical relationship between international trade, competitiveness and productivity was described. If suitable and useful, EU economies with similar traits were grouped or clustered, thereby facilitating the discussion.

#### The relation between industry and services in terms of productivity and value creation

European Commission, DG Enterprise and Industry January 2014 - September 2014

This Request for Services within a Framework Contract on Industrial Competitiveness highlighted the importance of the interrelation between manufacturing and services and its impact on productivity. The increasing 'servitization' of manufacturing becomes an important aspect with respect to competitiveness and the linkages between these activities become crucial. The purpose was to understand the mechanisms by which the industry and service sector complement each other to create higher value added products. This implied three central areas of interest: (i) quantification of the effects of co-operation; (ii) an improved understanding of the mechanisms of interaction, against the background of the changing natures of manufacturing and services and (iii) an understanding of the most important barriers concerning these interactions. wiiw had the lead in this project which was done in cooperation with Ecorys, IFO and IDEA.

The Competitiveness of firms, regions and industry in the knowledge-based economy: What room for jobrich growth in Europe? (MICRO-DYN)

European Commission, 6th Framework Programme October 2006 - January 2011

MICRO-DYN dealt with growth, employment and competitiveness in the knowledge-based European economy through a micro-founded firm-based approach. The nature of the analysis was 'bottom-up' i.e. moving from the micro-entities of economic actions and strategies at the enterprise level to sectoral, regional, national and European levels. The rationale for such an approach was that understanding the microeconomic foundations of innovation, competitiveness and growth at the firm level, as well as the firms interactions with the labour market, is key to understanding the nature of these phenomena at a more aggregated (regional, sectoral or macro) level and of the resulting aggregate economic performance. The analysis used as far as possible comprehensive data-sets across all European regions and industries. wiiw co-ordinated a consortium of 17 research institutions. http://www.micro-dyn.eu