

# List of Projects

## Doris Hanzl-Weiss

### **Eastern Europe Before Transition: Digitisation of data and analysis of CESEE's command economies**

*Anniversary Fund of the Oesterreichische Nationalbank*

*May 2021 - September 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.

Funded by the [Anniversary Fund of the Oesterreichische Nationalbank](#) (Project No. 18666).

### **Differences in real non-residential investment between the United States and EU countries**

*European Investment Bank (EIB)*

*May 2023 - June 2024*

Gross fixed capital formation in machinery and equipment and intellectual property products as a percent of GDP in the United States have exceeded those in the European Union since 2010. This difference emerged in the wake of the global financial crisis and has persisted until now. The project documents and accounts for the differences in real non-residential investment between the United States and EU countries, especially since 2010. The analysis is based on GFCF data taken from Eurostat and the recent EU KLEMS releases. To the extent possible, the analysis should highlight the 'investment gap' when comparing the EU and the US and assess potential reasons for these differences in investment patterns.

### **Supporting the compilation of consumption of fixed capital and stocks of fixed assets**

*Eurostat*

*April 2022 - April 2024*

In this project, wiiw will support Eurostat in the compilation of consumption of fixed capital and stocks of fixed assets in national accounts. This is done by comparative analyses of country data, comparisons of various methodologies and compilation practices, the elaboration of country specific guidance for possible improvement, reporting to National Accounts Working Groups, providing methodological support, developing metadata, and supporting the client in the organisation of a seminar.

### **Toward innovation-driven growth: innovation systems and policies in EU member states of Central Eastern Europe**

*Friedrich Ebert Stiftung*

*September 2023 - March 2024*

In this follow-up study building upon prior analyses of a new growth model for EU-CEE countries, our objectives are fivefold: (1) To explain in accessible terms the types of innovation systems and policies that foster the development of domestic innovation capabilities, drawing on global best practice. (2) To conduct a critical evaluation of the

current innovation landscape in EU-CEE countries, considering the impacts of ongoing green and digital megatrends. (3) To assess the strengths and weaknesses of innovation policies within EU-CEE countries, encompassing both national initiatives and opportunities stemming from EU industrial and technology policy frameworks. (4) To formulate a set of actionable policy recommendations aimed at fostering innovation-driven growth in the EU-CEE countries, thereby increasing productivity and resource efficiency. These recommendations will be tailored to the medium-term timeframe and take into account the political and historical context of the EU-CEE countries. (5) To tailor the findings of the study to the specific development needs and opportunities of each country through the preparation of country-specific briefing notes, while remaining mindful of the common challenges and opportunities across the EU-CEE region.

### **Key Forecasts and Macro Scenario Analysis**

*Addiko Bank AG*

*May 2023 - February 2024*

The wiiw carried out the 'Key Forecasts and Macro Scenario Analysis' - a set of agreed macroeconomic indicators. For five Addiko countries (plus the euro area and other key markets where appropriate), wiiw produced forecasts (up to five years) for a set of agreed macroeconomic and financial indicators. For some of these indicators, wiiw produced three scenarios in addition to the baseline: optimistic, pessimistic and negative.

### **Where are the growth potentials? The sectors that can boost convergence in CESEE (wiiw Team Leader)**

*Oesterreichische Nationalbank (OeNB)*

*June 2023 - November 2023*

Central Eastern European Countries (CEE, ie EU member countries of Central Eastern Europe) are in need of assessing their economic convergence process and identify their future drivers of growth, in terms of sectors, technologies and skills. It is key for CEE economies to upgrade their productions and remain competitive despite declining cost advantages. This analysis will be the result of a cooperation between the Austrian National Bank (OeNB), the European Investment Bank (EIB) and The Vienna Institute for International Economic Studies (wiiw). wiiw will contribute to the report with an analysis on "Export structures to identify promising sectors" and will also provide inputs, expertise and comments and actively participate in the exchange and discussions during the project.

### **Industrial Policy for a New Growth Model: A toolbox for EU-CEE countries**

*Friedrich Ebert Stiftung*

*July 2022 - December 2022*

The Central Eastern European member states of the EU (EU-CEE) marked impressive advancements in their socio-economic developments over the past decades and can be even regarded as one of the most dynamic regions in Europe. The countries' EU membership as well as their deep integration into regional and global value chains (GVCs) played a crucial role in this catch-up process. However, the period following the Great Recession has seen unimpressive labour productivity growth along with a somewhat slower, in some cases even derailed, convergence process. In the light of EU-CEE's positioning as 'factory economies' and their struggle to occupy the more sophisticated stages of manufacturing value chains, the key challenge faced by the region is to occupy higher value-added activities within the value chain. This study aims to strategically evaluate the countries' policy options in achieving this goal, and to design an appropriate industrial policy toolkit for them, taking full account of the ongoing megatrends. It aims to guide policy makers in making the best possible use of the available policy space and taking full advantage of EU membership, while at the same time steering the industrial policy discussions at the EU-level to one that better fits the position and capabilities of the EU-CEE. The study defines industrial policy in the EU context and explores lessons learned from past successful industrialisers. It maps the EU-CEE's industrial development, with a particular focus on green and digital aspects, in order to identify most promising growth areas, along with key areas of vulnerability. Subsequently, it dives deep into the discussion of flagship industrial policy instruments and discusses how they could be more effectively deployed in EU-CEE.

### **How do Economies in EU-CEE Cope with Labour Shortages? An Update**

*Austrian Chamber of Labour*

*January 2022 - November 2022*

The EU member states in Central and Eastern Europe (EU-CEE) were experiencing rising labour shortages prior to the COVID-19 pandemic, mainly due to a rapid demographic decline. As a result, the bargaining power of labour increased, wages were generally rising ahead of labour productivity, and people were investing in education. Czechia, Hungary, Slovenia and Slovakia became net receivers of migrants, while in Bulgaria and Poland

immigration largely compensated for the natives who went abroad. However, immigration from non-European countries as a general solution to the problem of labour shortages was highly problematic in the domestic political context. These were the main findings of the wiiw study "How do Economies in EU-CEE Cope with Labour Shortages?" published at the end of 2020. The aim of the current project is to update this study, in order to take into account the post-pandemic developments and the new population census data.

### **Economic and Social Impacts of FDI in CSEE**

*Ost-Ausschuss der Deutschen Wirtschaft e.V.*

*January 2022 - November 2022*

The study analysed the economic impact FDI had on the economies of Central, East and Southeast Europe and discusses pros and cons of FDI inflows. The analysis was conducted at the aggregate level as well as at the level of broad industry categories (according to available NACE industries) such as for instance manufacturing, finance, trade or information and communication, over the longer run.

### **Regional Cooperation in EU-CEE and Lessons for the Western Balkans**

*Bertelsmann Stiftung*

*June 2021 - May 2022*

In our previous study "Pushing on a String? An evaluation of regional economic cooperation in the Western Balkans", we concluded that a change in the EU's strategy towards the Western Balkans is needed. The current strategy has failed to deliver regional economic integration and development, has resulted in very meagre progress towards full EU accession, and has generated huge disappointment and frustration in the region. With these conclusions as a starting point, in the current study we ask whether and how the successful example from the formerly communist countries that joined the EU between 2004 and 2013 (EU-CEE) can be replicated in the Western Balkans. More specifically, we investigate to what extent regional economic integration improved in EU-CEE after EU accession, identify the suspected reasons for this, and determine which lessons can be drawn from this experience for the Western Balkan economies. Our main finding is that the best way to foster regional economic integration and development in the Western Balkans would be through policies aimed at raising incomes. One way in which this can be achieved is by increasing the EU transfers for the region, for example, through full access to the EU budget, with the necessary conditionality attached.

### **Growth and productivity accounts - Capital productivity and multi-factor productivity**

*Eurostat*

*July 2019 - December 2021*

Eurostat planned to publish for the first time capital productivity indicators (CAPI) and Multi-Factor Productivity to better meet the European policy needs. wiiw supported these activities with feasibility analyses, methodological developments, quality assessment of indicators and by raising awareness regarding capital productivity.

### **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).

### **Automotive sector in Europe, particularly in CESEE**

*Oesterreichische Nationalbank/Austrian Ministry of Finance*

*April 2021 - October 2021*

wiiw contributed to a report with an analysis for and section on part III "Automotive sector in Europe, particularly in CESEE" and the relevant parts for the intended outlets until the envisaged deadlines in Q3 and Q4 2021. wiiw also provided inputs, expertise, and comments on the other sections of the report, and actively participated in exchanges and discussions over the course of the project.

### **Impact Assessments - Analysis of the SME's Participation in Public Procurement and the Measures to support it"**

*European Commission, DG Grow*

*July 2018 - July 2021*

The study shall provide an overall analysis and description of SMEs presence in public procurement markets and an in-depth overview of the SME-friendly measures based on the various tool and techniques introduced by the 2014 procurement Directives. The geographic coverage of the study shall include all Member States and the EEA countries and will provide estimates for at least 2011-2017. wiiw is acting as Quality Manager in this tender.

### **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.

### **A new growth model in EU-CEE**

*Friedrich Ebert Stiftung*

*August 2020 - May 2021*

The eleven EU member states from Central, East, and Southeast Europe (EU-CEE) have undergone three decades of transition to market capitalism and convergence with Western Europe. There have been many successes and challenges, and the level of economic and social development varies widely across the region. The study finds that the convergence process, especially for the more advanced countries, has slowed since 2007 and that the current growth model may well be reaching its limit. The authors find that it will take decades for EU-CEE's more developed countries to halve the remaining gap to Germany and other rich countries in Western Europe. This implies that it is high time to think about a new growth model for the region. The study outlines the main priorities for a strategic transition to a new growth model of EU-CEE and shows substantial opportunities in a greener, digitised, automated world.

### **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.

### **CEEC-8: How do politics, economy and society deal with labor shortages?**

*Saturday, 18 May 2024*

*4/13*

*Austrian Chamber of Labour  
January 2020 - October 2020*

The aim of this project is to investigate the incipient labor shortage in the CEEC-8 (Bulgaria, Croatia, Romania, Poland, Slovakia, Slovenia, Czech Republic, Hungary). Due to decades of emigration, the working age population is falling dramatically. The supply and demand for work will balance each other out in the years to come. How do politics, business and society deal with this phenomenon? The study targets to provide a detailed overview of how the state, companies, trade unions and the labor force in the region react to the labor shortage and what leeway there is for economic policy. The historical analogies to similar situations in the post-war period should also be drawn, as well as the political economy of labor shortages should be analyzed.

**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.

**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 mowers 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.

**How EU funds tackle economic divide in the European Union**

*European Parliament  
January 2020 - April 2020*

This analytical study aims to provide data and related analysis on the topic of operating budgetary balance, its failures and limitations and to deliver evidence of the positive outcomes that Member States' experience from belonging to the EU, notwithstanding the status of their operating budget balance. wiiw is collaborating in this study with WIFO and Blomeyer&Sanz.

**Analysis of the main territorial challenges, needs and transnational cooperation potentials and strategy building for the Interreg CENTRAL EUROPE 2021-2027 Programme**

*Interreg CENTRAL EUROPE  
July 2019 - March 2020*

Interreg is a transnational programme established in the framework of the EU Cohesion Policy and has been supporting transnational cooperation in Central Europe for more than 20 years. As an overarching goal, transnational cooperation aims at improving capacities and policies as well as at triggering innovative processes and investments at territorial level. The Interreg CENTRAL EUROPE (CE) Programme supports regional cooperation among the nine central European countries Austria, Croatia, the Czech Republic, Hungary, Poland, Slovakia and Slovenia, as well as parts of Germany and Italy. Against this background, the objectives of this assignment are: (i) To prepare a territorial analysis for the CE programme area in view of drafting the Interreg CE Programme for the period 2021-2027. The analysis shall identify the main joint challenges and needs of the area as well as strategic relevant fields of transnational cooperation with the potential to overcome territorial disparities; (ii) to develop a strategy building process for the future CE 2021-2027 Programme, in consultation with regional and national key stakeholders of the CE programme area and (iii) to provide recommendations for the future

orientation and definition of the Interreg CE 2021-2027 programme strategy.

### **Study on logistics and wholesale trade in EU27** (*wiiw Team Leader*)

*European Commission, DG Enterprise and Industry*

*September 2018 - March 2019*

Logistics providers and wholesaler perform indispensable functions in the economy by linking manufacturers with each other and with retailers. Without the services they provide, supply chains would break down and products would not reach their intended markets. The aim of this study is thus to provide robust and reliable in-depth analyses of logistics and wholesale trade in EU27 (without the United Kingdom), including their structural and performance attributes. wiiw is responsible for identifying and analysing global value chains as well as European, North American and Asian value chains. Based on the World Input Output Database (WIOD) the analysis will focus on the characteristics of the most important sectors upstream and downstream from logistics and wholesale trade.

### **De-Regulierung und Re-Regulierung im Bereich der Europäischen Schieneninfrastruktur**

*ÖBB-Infrastruktur AG/Austrian Railway*

*April 2018 - December 2018*

The European domestic market in the railway sector was established from 2001 to 2016 on the basis of a comprehensive legal framework (the so-called "railway package"). The aim of this project is (1) to analyse the developments and the legal framework in European rail transport; (2) to give a detailed overview of the theoretical advantages and disadvantages as well as the practical experience with deregulation of rail transport in Europe; (3) to analyse the experience with deregulation of Californian electricity sector and its policy implications for rail transport. The study will be written in German.

### **Studies in the Areas of European Competitiveness**

*European Commission, DG Grow*

*August 2014 - July 2018*

The purpose of this framework contract is to provide the European Commission, DG Enterprise and Industry, with background studies concerning the competitiveness of European industries. These background studies are mainly used for the preparation of the Commission's European Competitiveness Report which is published annually in order to provide analytical input to the policy debate on issues related to competitiveness and to underpin proposals and recommendations regarding the Europe 2020 strategy and future enterprise policy.

### **Austria's Economic Competitiveness in a Neighbourhood Context**

*Anniversary Fund of the Oesterreichische Nationalbank*

*August 2016 - July 2018*

Since the Eastern enlargement of the EU in 2004, Austria has lost global export market shares. At the same time exports to Central, East and Southeast Europe have gained a significant portion of Austria's total exports. Moreover, in recent years Austrian GDP growth has slowed down and unemployment increased. In this context our main research question is whether the opening to the East had a structural lock-in effect for Austria's economy. In a novel approach on the territorial lock-in effect we will apply a multi-perspective view from a microeconomic (firm-level), mesoeconomic (industry-level) and macroeconomic (country-level) perspective. As regards data, we will have exclusive access to an update of the world input-output database including data for the Western Balkans. The new data will add substantially to the project, the current discussion on Austria's competitiveness and the development of policy recommendations.

### **Territorial challenges, potentials and impacts of transnational cooperation in Central Europe**

*Interreg CENTRAL EUROPE*

*February 2018 - July 2018*

The project analyses the territorial challenges, potentials and impacts of the transnational cooperation programme Interreg CENTRAL EUROPE (CE). It is divided into three tasks:

- Identification of the main territorial challenges and needs of CE,
- Analysis of the impacts and results of transnational cooperation in CE achieved by the CE 2007-2013 and the Interreg CE 2014-2020 programme, illustrated by concrete case studies,

- Outlook and conclusions on the future needs and potentials of transnational cooperation in CE.

Task1 analyses ten main challenges of the CE area, i.e. a) circular economy / environment, b) climate change, c) demographic change / migration, d) digital economy, e) employment / skills, f) energy, g) globalisation / competitiveness, h) governance, i) social situation / social risks and j) transport infrastructure / accessibility. For each challenge the study identifies specific policy areas for which TNC has a high potential to promote regional integration and development and analyses the TNC policy options to address them.

Task 2 analyses the achievements and results of the Interreg CE 2007-2013 the CE 2014-2020 programmes. The **first part** of the task includes a quantitative analysis of the financial, output and outreach and results data as well as a qualitative analysis of the CE 2007-2013 programme's results. The **second part** consists of a survey conducted among 2007-2013 project participants and of 12 case studies providing an in-depth analysis of selected and representative projects of the 2007-2013 period.

Task 3 summarises the results of assesses the key contributions of the CE programmes to tackle the CE region's challenges. It comments on the CE programme's synergies with other EU policies, provides recommendations for the upcoming call for projects of the Interreg CE 2014-2020 programme and gives an outlook of a potential focus of a post-2020 CE programme.

### **Economic policy implications of the Belt and Road Initiative for CESEE and Austria**

*Embassy of the Peoples Republic of China  
October 2017 - March 2018*

The Belt and Road Initiative (BRI), a vision to revive the ancient 'Silk Road', was first presented by the Chinese President Xi Jinping in 2013. This initiative will affect more than forty countries throughout Eurasia and Africa. For Austria, it is particularly interesting, due to the country's strong economic relations with Eastern Europe and the Western Balkans. China has identified this region as the gateway to Western European markets, and emphasised its strategic importance with the initiation of a diplomatic initiative titled '16+1'. Furthermore, this region has a particularly high need for infrastructure investment, which form the core of the BRI. An analysis of developments in trade and investment, accompanied by the evaluation of the need for infrastructure investment in sixteen countries in Central, East, and Southeast Europe (CESEE), should allow for the identification of potential fields of cooperation between China and Austria in the context of the 'new Silk Road'.

### **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.

### **Technical Assistance for the Preparation of CEFTA Investment Report**

*Central European Free Trade Agreement (CEFTA)  
October 2016 - December 2017*

The aim of this Service Contract is to provide technical assistance for the preparation of a CEFTA Investment Report. Beneficiaries are the Parties of the Central European Free Trade Agreement (CEFTA) 2006. The Report will support the CEFTA Parties in fostering FDI in order to meet common development goals and promote the region as

an attractive investment site. Systematic collection and methodologically sound assessment of FDI-related data including those on foreign affiliates (FATS) is an indispensable tool in the hands of policy-makers to stimulate and, if necessary, direct the foreign direct investment process for achieving the expected positive effects. To this end, the CEFTA Working Group on Trade in Services Statistics, FATS and FDI Statistics has set the objective to improve the quality of statistics across the CEFTA region and harmonise statistics with those of the European Union. Part A will present and analyse FDI trends in CEFTA Parties. This part deals with the current trends of FDI in the Region with reference to the period 2009-2015. Part B will provide a detailed analysis of the pattern of multinational enterprises' (MNEs) involvement in the manufacturing sector and its impact on local economies.

### **Study on investment needs and obstacles along industrial value chains (wiiw Team Leader)**

*European Commission, DG Enterprise and Industry*

*April 2016 - December 2016*

The aim of this study was to identify special investment needs, funding gaps and obstacles for investments along industrial value chains as well as to propose actions for overcoming obstacles especially for the coordination of investments within this value chains. First of all industrial value chains with high potential for growth within the European Union were identified. Afterwards five case studies have been conducted that illustrated funding gaps and needs as well as obstacles in these selected value chains. These five case studies examined: (1) the sector of engine construction - additive manufacturing, (2) rubber and plastic products - production of rubber, (3) food sector - retraceability of food, (4) automobile industry - batteries for electric vehicles as well as (5) metal production and processing - recycling. At the end for each of these value chains an investment package was developed.

### **The European construction value chain: performance, challenges, role in the GVC**

*European Commission, DG Grow*

*January 2016 - June 2016*

The study made a clear picture of the construction value chain on the European level, its structure and connections and its development and efficiency. In the course of strengthening the internal construction market the integration within the European construction value chain was valued, especially in the sense of cross-border dimensions of market integration. In the context of the promotion of the position of the European construction industry, the European position and role at the global level was examined. Another point was to examine future settings that influenced activities within the construction industry - within Europe as well as on a global level, and to evaluate appropriate challenges for the construction value chain in Europe. Finally the prior political impacts, that emerge from the development and integration of European and global construction value chains, were filtered.

### **EU wholesale trade: analysis of the sector and value chains**

*European Commission, DG Grow*

*January 2016 - June 2016*

The study examined the European wholesale sector from several perspectives. First of all an overview of size and the economic significance of the wholesale was gained. As a second step the wholesale was seen as an economic function that connects different sectors and countries to global value chains. And as a third level it was gone deeper into the wholesale sector with a case study about the subsector 'Wholesale of mining, construction and construction engineering' which was examined more precisely.

### **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.



### **Growth-Innovation-Competitiveness: fostering cohesion in Central and East Europe (GRINCOH)**

*European Commission, 7th Framework Programme*

*April 2012 - March 2015*

GRINCOH was an FP7 research project with the main objectives: (1) to establish development scenarios for the CEECs for the period up to 2020; (2) to identify the implications for sustainable growth - based on innovation and the development of technological capabilities - and greater economic, social and territorial cohesion in the CEECs; and (3) to advise on future policy options for the CEECs, and in particular for EU cohesion policy. wiiw led a work package on economic development patterns and structural change in the process of transition and EU membership. Furthermore, wiiw contributed research on labour market development, migration, inequality, trade integration, foreign direct investment, EU budget as well as regional aspects.

<http://www.grincoh.eu>

### **Increasing competitiveness in the Western Balkans region - opportunities and limits**

*German Federal Ministry of Finance*

*July 2013 - January 2015*

This study was written in German, original title: 'Steigerung der Wettbewerbsfähigkeit in der Westbalkanregion - Möglichkeiten und Grenzen'. The European Union as well as international and bilateral players increasingly consider higher competitiveness as a key factor for economic development in the Western Balkans region that is to be more and more autonomous and resilient in the long term. Against this background, the project aims to identify the potential for (further) structural reforms and their implementation and efficient realisation, as well as the potential for growth and strategies to exploit it. The project is carried out in cooperation with the Halle Institute for Economic Research.

### **Energy efficiency and EU industrial competitiveness: energy costs and their impact on manufacturing activity (Competitiveness Report 2014)**

*European Commission, DG Enterprise and Industry*

*October 2014 - November 2014*

This study serves as a background report for the annual European Competitiveness Report of the European Commission (DG ENTR). The European Commission is currently in the process of preparing a new energy and climate framework for the period up to 2030. For this purpose, DG ENTR has commissioned a study which should provide a comparative analysis of the impact of changing energy costs on EU industrial competitiveness at country and sectoral level, and vis-à-vis its main external competitors (the United States, Japan, China and Russia), with a view to identifying future trends in production and energy efficiency strategies. While the recent gains in energy efficiency in the EU manufacturing sector have been impressive, the gap in energy prices between the EU and the USA has widened, which might potentially undermine EU industrial competitiveness, particularly in energy-intensive sectors. To a large extent, the study relies on data from the latest version of the World Input-Output Database (WIOD).

### **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.

### **Study on the relationship between the localisation of production, R&D and innovation activities**

*European Commission, DG Enterprise and Industry*

*December 2013 - May 2014*

This study was based on empirical evidence, and helps to explain the link between innovation and geographical dispersion at EU aggregate level. It examined (1) existing evidence on the drivers that determine the choice of production location by a firm and, in particular, the role of innovation in that decision; (2) impact of production location on research and innovation activities, in particular the level and the location of innovation activities of the firm; and (3) consequences deriving from decisions regarding the location of firm innovation, as well as the impact on innovation in the home economy and/or on access to markets. wiiw co-operated with IDEA Consult in this study and contributed to the literature review, data analysis and case studies. The study was part of a framework contract with DG ENTERPRISE on Industrial Competitiveness.

### **Die Sachgüterproduktion Österreichs: Entwicklung und gesamtwirtschaftliche Bedeutung im internationalen Vergleich**

*The Chamber of Labour (AK Wien)*

*November 2013 - March 2014*

The employment and income situation in the manufacturing sector of a country – especially in small and open economies – is driven by different and partly opposing economic factors. This includes different productivity developments (e.g. catching-up of emerging countries), wage developments that may reflect the economic conditions of other sectors of the economy or the economy as a whole, exploiting innovation potential and specialisation in relevant industries and the opportunities and challenges of internationalisation of production and trade. Individual countries positioned their manufacturing industries differently. This study analyses the development of the Austrian manufacturing industry compared to other countries, the potential determinants of this development and the importance of the manufacturing industry in terms of value added and employment in the Austrian economy.

### **The Future of Manufacturing in Europe**

*Dublin Foundation*

*January 2013 - January 2014*

There is an increasing concern about the future role of manufacturing both at the European level and in individual Member States of the EU. In the EU as a whole the manufacturing sector employed around 30 million people in 2010 and generated EUR 1590 billion of value added. The future development of manufacturing and, in particular, the way that its share of value-added and employment will tend to change in the coming years is heavily affected, as in the past, by three main factors, or driving forces: technology, the nature of the demand for manufacturing goods, and globalisation. wiiw is part of a consortium lead by Applica. This study will examine the trends in manufacturing performance in different parts of Europe and the factors underlying them.

### **Study on structural change (Competitiveness Report 2013)**

*European Commission, DG Enterprise and Industry*

*November 2012 - June 2013*

This study serves as a background report for the yearly Competitiveness Report of the EC. It illustrates and analyses the broad trends in the relative weight of quite highly aggregated sectors within market activities. It provides an overview as well as an explanation of the broad patterns and trends of structural change for the EU-27 member states. Based on empirical evidence, economic consequences of the observed patterns of structural change will be examined with special attention to the implications of emerging middle-income growth traps. The results will include policy conclusions and provide evidence on the stylised facts of structural change in Europe, the importance of structural change for aggregate growth and the relevance of basic economic mechanisms at work. Furthermore, it will highlight the importance of manufacturing relative to other sectors, which is not sufficiently captured merely by the percentage of the workforce it uses. wiiw is partner in a consortium lead by The Nordic Institute for Studies in Innovation, Research and Education (NIFU).

### **The development of EU and its Member States' external competitiveness**

*European Commission, DG Trade*

*August 2012 - March 2013*

The objective of this work was to analyse the recent developments in the EU's external competitiveness updating the study 'The Evolution of EU and its Member States' Competitiveness in International Trade' study from January 2009. This study considered the EU's relative position and thereby developments in rising emerging markets, but

also the effects of the economic crisis. wiiw worked on the services and value-added (WIOD) type indicators to flank the elements of the data analysis to be done by CEPPII.

### **Internationalisation of business investments in R&D and analysis of their economic impact**

*European Commission, DG Research and Innovation*

*June 2010 - October 2012*

The internationalisation of corporate research and development activities is one of the most important issues within the current integration of the world economy. The study aimed at providing an in-depth analysis of this development. A consortium consisting of wiiw and AIT (Austrian Institute of Technology) construed a comprehensive dataset on R&D activities of foreign-owned firms in a number of countries. In a second step, they employed this database to analyse cross-country patterns of R&D internationalisation, as well as the drivers and impacts of R&D internationalisation. wiiw contributed its expertise in the analysis of economic growth and structural change, international trade and foreign direct investment, labour markets and the European integration process to the study.

### **The EU industry and the global value chain (Competitiveness Report 2012)**

*European Commission, DG Enterprise and Industry*

*January 2011 - May 2012*

This study serves as a background report for the yearly Competitiveness Report of the EC. It identifies a number of policy measures that support the capability of firms in the EU to be competitive in a global market. Especially the changes in value chains within the last ten years, which have led to an extension of trade in the course of globalisation and to an increasing segmentation of the production process, have been analysed. Furthermore, the impact of the economic crisis on changes in trade patterns and potential disruptions of international supply chains as well as possible long-term dynamics of value chains on the competitiveness of firms in the EU and their internationalisation have been analysed. The results serve as an input for the re-formulation of measures in the EU's industrial policy. The study was coordinated by wiiw.

[http://ec.europa.eu/enterprise/policies/industrial-competitiveness/competitiveness-analysis/european-competitiveness-report/index\\_en.htm](http://ec.europa.eu/enterprise/policies/industrial-competitiveness/competitiveness-analysis/european-competitiveness-report/index_en.htm)

### **World Input-Output Database (WIOD)**

*European Commission, 7th Framework Programme*

*May 2010 - April 2012*

WIOD aimed to develop databases, accounting frameworks and models for policy-makers who are facing increasing and pressing trade-offs between socio-economic growth and environmental problems. The core of the database is a set of harmonised supply and use tables, alongside with data on international trade in goods and services. These two sets of data have been integrated into sets of inter-country input-output tables. Taken together with extensive satellite accounts with environmental and socio-economic indicators, these industry-level data provided the necessary input to several types of models used to evaluate policies aimed at striking a suitable balance between growth, environmental degradation and inequality across the world. wiiw led two work packages in this project: (1) WP2 „International Trade Data“ and (2) WP8: „Application of the database: Socio-Economic Aspects“. The institute also contributed to WP3 „Estimation of inter-country input output tables“ and to WP5 „Satellite Accounts: Socio-Economic Indicators“.

<http://www.wiod.org>

### **Monitoring of sectoral employment**

*European Commission, DG Employment, Social Affairs and Inclusion*

*December 2010 - April 2012*

The aim of the study was to provide a comprehensive collection and a long-term analysis of key sectoral data with a view to identifying and monitoring sectoral employment developments and inter-dependencies. The impact of the crisis has been analysed for a representative set of sectors, paying special attention to issues such as flexicurity, skills, outsourcing and restructuring, labour productivity, technological change. wiiw coordinated this project in collaboration with Applica and with support from various local experts.

### **Country risk analysis**

*Erste Group Bank AG*

November 2011 - April 2012

Country studies are performed for Austria, Croatia, the Czech Republic, Hungary, Romania, Russia, Serbia, Slovakia and Ukraine, analysing the political and institutional, economic and social situation on a qualitative and quantitative basis.

### **Market analysis of selected sectors - Poland (wiiw Team Leader)**

*Reed Exhibitions Austria*

October 2011 - November 2011

In a country study on Poland, both the macroeconomic development and the sectors which are of special importance for the client's marketing activities are analysed.

### **Services and EU's external competitiveness (Competitiveness Report 2011)**

*European Commission, DG Enterprise and Industry*

November 2010 - March 2011

This study serves as a background report for the annual European Competitiveness Report of the European Commission (DG ENTR). It investigates the role of knowledge-intensive service sectors in the EU economies as compared to other major economies such as the US and Japan. This is done from different perspectives pointing towards the various trajectories that the phenomenon of 'quarternisation' (i.e. the structural changes of the economies following 'tertiarisation') might take. Finally, we point towards the increasing role of service trade in overall trade, relate it to the patterns of trade in high-tech manufacturing goods and the relative importance of imported KIBS services in production costs and the increasing share of KIBS in value added exports.

[http://ec.europa.eu/enterprise/policies/industrial-competitiveness/competitiveness-analysis/european-competitiveness-report/comrep2011\\_en.htm](http://ec.europa.eu/enterprise/policies/industrial-competitiveness/competitiveness-analysis/european-competitiveness-report/comrep2011_en.htm)

### **Employment in the gas and electricity sectors in the Western Balkan contracting parties of the Energy Community**

*European Commission, DG Employment, Social Affairs and Inclusion*

November 2009 - February 2011

The aim of this study was to analyse the employment development in the gas and electricity sectors in seven countries of the Western Balkans. In doing so, the impact of liberalisation and of the resulting restructuring processes on the number and quality of jobs is investigated and likely trends were presented. The study was based on quantitative analysis as well as on qualitative analysis in the form of stakeholder interviews.

### **Study on trade in intermediate products and EU manufacturing supply chains (Competitiveness Report 2010)**

*European Commission, DG Enterprise and Industry*

December 2009 - January 2011

The study analysed trade in intermediate products across several dimensions. First the volume, number of varieties and the quality of intermediates imported were analysed as well as the structure of EU exports and their competitive advantage. Additionally, the study investigated how increased trade in intermediate products impacts on manufacturing supply chains in terms of geographical sourcing. Secondly, the study looked at the inter-linkage between manufacturing and services using a case study on "EU Manufacturing value chains in the light of globalisation: The case of the ICT industry". Thirdly, the impact of the crisis as well as other possible factors (such as exchange rate movements or regional integration) on the trade in intermediate products have been compared with the impact on the final goods trade. Finally, policy implications have been derived from the results obtained.

### **The Competitiveness of firms, regions and industry in the knowledge-based economy: What room for job-rich 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>

### **The role of services in the economy: an input-output analysis for the new Member States and Austria**

*(wiiw Team Leader)*

*Anniversary Fund of the Oesterreichische Nationalbank*

*July 2008 - October 2010*

Using input-output analysis, the study investigates the role of services in the Central European new EU Member States (NMS) Czech Republic, Hungary, Poland, Slovak Republic, and Slovenia and compares it to that in Austria. Investigation is done at the 2-digit level, comprising 26 service industries (NACE 50-99), for the years 1995, 2000 and 2004. The role of services includes not only their position in the production structure per se but also their increasing importance as intermediate inputs. The main questions investigated are: (i) Has there been a structural convergence process concerning the role of services between the NMS and Austria? What explains differences across individual NMS? (ii) Do services already have the same importance as a supplier of intermediate inputs in the NMS as in Austria? Are services still less intertwined with the rest of the economy? (iii) Is there still a lag in the development of knowledge-intensive business services in the NMS?