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

### **List of Projects**

### Monika Schwarzhappel

#### IV - Key economic indicators

Federation of Austrian Industries March 2014 - December 2024

For many years, wiiw has been providing the Federation of Austrian Industry with 'Key Economic Indicators' for the countries of Central and Eastern Europe. Deliveries are timed to coincide with the publication of the spring and autumn forecasts.

#### Monitoring and Assessing Labor Markets in the Western Balkans

The World Bank

June 2022 - November 2024

Western Balkan economies have persistently performed poorer than their peers from Central, Eastern and South-East Europe. One area where they have been particularly weak is the labor market. In 2021, none of them had an unemployment rate below 10%. In addition, the countries face a pronounced gender gap, high informality, low salaries, with very high rates of poverty among the employed. A massive emigration causes a continuous shrinking of the labor force. On top of these challenges, reliable, consistent, detailed and comparable labor market indicators are missing. For that reason, the World Bank initiated a joint project with the Vienna Institute for International Economic Studies (wiiw) which aimed to develop a unique and freely available labour market database. It was also the basis for a joint annual Western Balkans Labor Market Trends Reports that analysed and highlighting key labour market developments in the region. The project was entitled SEE Jobs Gateway and lasted from 2016 to 2020. The key project outcomes are still accessible via the wiiw website. The current project aims to produce annual updates of the labour market database as well as its extension into several new directions. Annual Labour Market Briefs will feature specific topics, such as employment in new foreign direct investment projects, employment by occupations, labour taxation or migration. The complementary activities aim to encourage the wider academic and political community to target their analysis and measures and to engage in an informed debate within the region, the international academic and donor communities.

# 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).

#### Nearshoring and decarbonisation in the Western Balkans

DIHK - Deutscher Industrie- und Handelskammertag January 2024 - May 2024

This project follows up on wiiw's previous study "Getting stronger After COVID-19: Neashoring Potential in the Western Balkans" and aims at assessing whether there has indeed been some near-shoring to the Western Balkans during the past 2.5 years and in which countries and industries it has occurred. In addition, the project will explore what companies from the Western Balkans think about decarbonisation, what the challenges are that they are facing with respect to it, and how nearshoring trends can be synergised with ongoing efforts in decarbonisation and green transformation. The main research questions will be addressed by analysing quantitative and qualitative data on FDI in the WB6, by conducting and analysing surveys of WB6 companies and finally by conducting and analysing surveys of German companies, in order to assess their perceptions and views on the importance of decarbonisation for their investment and cooperation with other companies.

#### 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.

### Carbon Intensive Regions in Transition - Unravelling the Challenges of Structural Change (CINTRAN) European Commission, Horizon 2020

May 2020 - April 2024

In order to meet the climate change mitigation objectives of the European Union as well as the objectives of the Paris Agreement, it is inevitable that the European Union phases out fossil fuel consumption in the power sector and decarbonizes fossil-fuel dependent industries. However, if not managed well, such a structural change may cause serious economic impacts, societal upheaval, aggravated social inequalities and hardship. To minimize such consequences it is necessary to better understand the patterns and dynamics of structural change in response to decarbonization at the regional level, to understand which parameters determine the pace of transformation as well as the capacity of regional actors to adapt and pro-actively create alternative structures. This project aims to enable these activities through highly integrated, inter- and transdisciplinary research working in close collaboration with regional stakeholders. It combines quantitative model-based research with qualitative in-depth analysis. The qualitative research will focus on four highly fossil-fuel dependent regions: Western Macedonia (Greece), Silesia (Poland), Ida-Virumaa (Estonia) and the Rhenish mining area (Germany). The diversity of these regions will enable the project to derive generalizable insights about the patterns and dynamics of decarbonization and the corresponding structural adjustments that hold relevance for all carbon-intensive regions in the EU and its neighbouring countries.

https://coaltransitions.org/projects/cintran/

#### Online database for the Danube Region Monitor - People and Skills

Austrian Agency for Education and Internationalisation (OeAD) and L&R Sozialforschung March 2022 - May 2023

This project consists of developing a user-friendly online database with statistics and indicators on education systems and labour markets in the 14 countries participating in the European Union Strategy for the Danube Region (EUSDR). The online database is primarily designed for experts in ministries and (international) organisations who deal with the EUSDR and the fields of education and labour markets in a transnational context. https://peopleandskills.danube-region.eu/danube-region-monitor/

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

Oesterreichische Nationalbank/Austrian Ministry of Finance January 2014 - December 2022

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

and implementation of these seminars as well as for the selection of the participants.

#### 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.

#### **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/

#### Demographic and economic development in Central and East European countries (CEECs)

City of Vienna

September 2021 - June 2022

The population of the city of Vienna has been rising continuously since the mid-2000s. Between 2005 and 2020, the population increased by 17%, mainly due to a positive migration balance. In addition to immigration from Germany and the Near and Middle East, immigration from the Central and Eastern European EU countries (EU CEEC), which has increased significantly since these countries joined the EU, but especially since the opening of the Austrian labour market (2011, 2013 and 2020), plays an important role. Since 2019, however, Vienna has seen a decline of immigration from Serbia, Montenegro and Kosovo, Slovakia and Poland and since 2020 also from Bulgaria, Hungary and Romania. The project aims to update the earlier wiiw study 'Population and Economic Development in Central and Eastern European Countries (CEEC)' by analysing the migration potential from the EU CEECs, as well as from Bosnia and Herzegovina and Serbia to Vienna. It thereby provides an empirical basis for the city's population forecasts and labour market analyses.

#### 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.

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

Anniversary Fund of the Oesterreichische Nationalbank May 2020 - September 2021

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

project contributed to the recent policy discussion on fiscal devaluation, and the ongoing policy debate on the global minimum corporate income tax.

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

# Connectivity and interactions between global value chains and foreign direct investment networks Anniversary Fund of the Oesterreichische Nationalbank May 2020 - July 2021

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

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

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, Sowakeit, 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.

#### **Western Balkan Regional Cooperation**

Bertelsmann Stiftung June 2018 - July 2020

Regional cooperation has been the main instrument of EU intervention in the post-conflict Balkans. The overall goal of this policy has been to increase economic and social connectivity in order to achieve political stability and enhance security, as a precondition for EU accession. This process has now lasted for about two decades. This study evaluates the success of the EU's strategy of regional cooperation in the Western Balkans over the last two decades from an economic perspective. It defines the prerequisites for successful regional cooperation in an institutional, political and economic sense, and assess the extent to which they existed in the Western Balkans at the start of the 2000s. It identifies the key facets of the EU's strategy to deepen trade, investment and infrastructure connectivity in the Western Balkans, and establishes the impact that this has had. Finally, it assesses the state of play in 2020, and makes suggestions for the way forward.

# 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.

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

Joint Research Centre (JRC) October 2018 - April 2020

The research project analyses the interaction between capital accumulation and FDI on the one hand, and global

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

#### 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.

#### Macroeconomic Forecast (wiiw Team Leader)

Sherhank

October 2019 - March 2020

Countries - Macro-Economic Forecast: The wiiw statistics and country monitoring team provided on macro-economic indicators as well as forecasts for seven countries in Central, East and Southeast Europe to Sberbank Europe AG.

#### **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. <a href="https://data.wiiw.ac.at/seejobsgateway-q.html">https://data.wiiw.ac.at/seejobsgateway-q.html</a>

### Industry level growth and productivity data with special focus on intangible assets (EUKLEMS update) European Commission, DG Economic and Financial Affairs

July 2018 - October 2019

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

#### Infrastructure Investment in the Western Balkans: a First Analysis

European Investment Bank (EIB)

February 2018 - June 2018

The study provided a first analysis of the recent development in infrastructure investment in the Western Balkans,

identified key infrastructure initiatives in the region, outlined the political dimension, and proposed a blueprint for potential initiatives in other parts of the EU neighbourhood. It also provided national accounts infrastructure investment data collected from Western Balkan statistical offices.

#### Production linkages, value added trade and employment in the wider Europe

Anniversary Fund of the Oesterreichische Nationalbank January 2015 - December 2016

The establishment of supply and production links has been a major driving force of the integration of the new EU Member States. Countries strongly integrated in production networks benefited in terms of productivity, value added and export growth. An important question on the further widening of Europe therefore is the integration of today's accession countries and possibly the EU neighbourhood countries in that respect. For a detailed study of actual patterns of production integration, a European multi-country input-output table is constructed allowing for an analysis of patterns of integration and value added trade in the wider European context. The potential impacts are further investigated by using a gravity modelling approach accounting for the importance of trade in intermediates and value added trade. Finally, various scenarios will be calculated providing evidence of potential impacts of further integration or disintegration on income and employment.

#### **Smart Public Intangibles (SPINTAN)**

European Commission, 7th Framework Programme December 2013 - November 2016

The SPINTAN project extends both the theoretical and the empirical approach introduced by Corrado, Hulten and Sichel (2005, 2009) including the Public Sector intangibles in their analytical framework in different complementary directions. The main outcomes were: (1) A Public Sector Intangibles Database for a wide set of European Union (EU) countries, supplemented by some large non EU countries complementing the harmonised intangible measures developed by INTAN Invest. (2) Analysis of the key issues with regard to the boundaries of public intangibles between various public and private categories, such as R&D, skill formation and IT investment. New ways to measure Public Sector intangible capital services, and especially the rate of return on public intangibles, were developed. (3) Analysis of the impact of Public Sector intangibles on innovation, well being and "smart" growth. The project paid special attention to the consequences of austerity policies, i.e. the project measures the impact on intangible assets investment of the austerity policies after the crisis and quantifies its impact on growth and well being. The SPINTAN Project was carried out by 12 European partners and two non European Associated Members that joined in the first months of the project. wiiw was involved in the methodological and conceptual work to identify the relevant assets and has provided data for the new Member States and Austria to produce the envisaged cross-country harmonised database of public sector intangibles. It also contributed to the work on spillovers from intangibles and on austerity & recovery, focusing on the effects of government spending in an international inputoutput framework.

http://www.spintan.net

### Socio-economic assessment of the Danube Region: state of the region, challenges and strategy development

Ministerium für Finanzen und Wirtschaft Baden-Württemberg July 2013 - October 2015

The main objective of this project was an analysis of potential opportunities, requirements, challenges, and recommendations, in order to enhance the competitiveness, the innovative strength, the attractiveness, and the prosperity of the entire region of the Danube riparian countries and regions, and to develop strategic orientations in view of transnational and interregional cooperation for the period 2014-2020. wiiw developed this assessment in cooperation with two German partners, the Centre for European Economic Research (ZEW) - which was also the leader of the project - and the Institut für Angewandte Wirtschaftsforschung (IAW). The focus on wiiw's contribution was on labour markets, regional development, cluster development and cooperation in the Danube Region.

#### 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

#### Crisis effects: growth prospect, social impact and policy responses in SEE and CIS

Oesterreichische Nationalbank/Austrian Ministry of Finance July 2011 - June 2013

The main objective of the project is to establish economic research capacities throughout Southeast Europe (SEE) and the Commonwealth of Independent States (CIS), to promote knowledge transfer into the regions, to facilitate networking between researchers and to assist in securing knowledge transfer from researchers to policy makers. Activities to achieve this include research calls, mentoring, workshops, conferences and policy dialogues. The project is structured into bi-annual research cycles focusing on a specific research theme of particular importance. During this phase, research aims at analysing whether the international crisis shock introduces structural breaks in the distribution of income and other welfare dimensions, conditional on the change in the potential speed of growth, the quality of development, and the induced or adopted policy changes in SEE and CIS. The project is part of the Global Development Network (GDN), a multilateral organisation founded by the World Bank in which wiiw acts as a hub for SEE.

#### 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.

## Creation of a database for value added and gross output (sales) according to the KiA classification Joint Research Centre (JRC) January 2012 - August 2012

KiAs (Knowledge-intensive Activities) are defined as economic sectors in which more than 33% of the employed labour force has completed academic-oriented tertiary education. The Commission requested the compilation of a database for the two following series: value added and gross output (sales) according to the KiA classification, for all Member States of the European Union, EFTA countries, and the main competitors of the European Union, including the United States, Japan, Brazil, China and South Korea.

#### **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

#### **EuropeAid MIDWEB** (wiiw Team Leader)

*EuropeAid* 

February 2011 - February 2012

In order to facilitate the access of potential migrants from the Western Balkans (WB) to the labour markets in the EU, and potential returnees' access to the labour markets, this project developed a database of skills per sector needed for each country in the WB. In cooperation with the national employment services and the national statistical offices, a list of skills per sector has been compiled. These lists targeted principally the émigrés from the WB who consider return to their homeland as an option in their migratory experience, but also potential migrants from the region that would consider working in another country in the WB. In addition, a similar list was compiled for each WB country but with skills per sector needed in the main countries of destination from the EU to serve potential migrants from WB countries. All these lists were incorporated in a database accessible via the Migrants Service Centres's website. The data is available also to those who approach the MSCs in person as well as to policy-makers. wiiw was responsible for task 1.2 'Develop databases of skills per sector needed in the EU and in the Western Balkans'.

#### **Regional development in Central and Eastern Europe**

WISDOM

September 2010 - December 2011

This project analysed and investigated the effects of the internationalisation of labour markets, also using simulation techniques. It pursued three aims: (1) provide coherent scenarios at the level of Austrian regions and neighbouring countries (including Poland, Romania and Bulgaria) with respect to employment, qualification and migration; (2) develop a long-term simulation model for Austria; and (3) identify potentially growing gaps at the regional level with respect to employment, qualification and migration based on the robust scenarios. Particularly, the project provided a detailed overview of the developments with respect to employment and migration processes of Austrian regional labour markets as well as in the neighbouring countries.

#### Study on labour taxation in CEE countries

TPA Horwath

March 2011 - June 2011

The study analysed the development of wage costs, taxation of labour and the structure of trax revenues in CEE countries (Bulgaria, Croatia, Hungary, Poland, Romania, Serbia, Slovakia, Slovenia, Czech Republic), with Austria as a point of comparison. The analysis of wage costs was based upon gross and net wages plus employer contributions. Unit labour costs were chosen as indicators for productivity; and the tax strcture was analysed mostly with the aim of indicating the relative share of labour taxation relative to other taxes, especially indirect taxes.

## Strategic partnership in support of the integrated regional development plan of the Autonomous Province of Vojvodina

Austrian Development Agency (ADA) January 2008 - June 2011

The main objective of this project was to strengthen and support the socio-economic development process of the Autonomous Province of Vojvodina by implementing specific measures, which are combined in a multi-sectoral action plan. The specific role of wiiw in this project was to support a regional economic research institute in capacity building, e.g. by setting up an economic model, a business barometer methodology and implementation, training in mathematics and statistics, mentored research, scientific dissemination and networking as well as general management skills.

### 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. <a href="http://www.micro-dyn.eu">http://www.micro-dyn.eu</a>