



GRANT AGREEMENT  
NUMBER — 692191 — SmartEIZ

**Horizon 2020 Twinning project ‘SmartEIZ’**

**Training Workshop:**

**‘Companies, Innovation, Productivity’**

**26-28 June 2017**

**University College London, Scholl of Slavonic and East European Studies**

The workshop will be divided in two parts. In the 1<sup>st</sup> part of the TW will be fully embedded into the CSSES international conference *“Exploring Technology Upgrading in Emerging and Transition Economies: from “Shifting Wealth I” to “Shifting Wealth II”*, held at SSEES on the 26-27<sup>th</sup> June 2017 (<https://www.ucl.ac.uk/ssees/comparative-studies-emerging-economies/workshops>). It is recommended for the participants from SmartEIZ to attend workshops marked with an asterisk (\*). In the 2<sup>nd</sup> and final part, on the 28<sup>th</sup> June, the TW will be structured around presentations of EIZ researchers (with a discussant) and one external speaker.

**Part 1: Monday 26<sup>th</sup> and Tuesday 27<sup>th</sup> June 2017**

INTERNATIONAL CONFERENCE **‘EXPLORING TECHNOLOGY UPGRADING IN EMERGING AND  
TRANSITION ECONOMIES: FROM ‘SHIFTING WEALTH I’ TO ‘SHIFTING WEALTH II’?’**

Second annual conference of the UCL Centre for Comparative Study of the Emerging  
Economies

26-27 June 2017

The process of ‘shifting wealth’ denotes the increasing economic weight of emerging and transition economies in the world economy (OECD, 2014). This trend was particularly discernible until 2008 after which we have seen narrowing of the growth differentials and the increasing awareness of the emergence of the so-called middle-income trap in the emerging and transition economies.

The initial opening of China and India coupled with the opening of the former socialist world countries in the 1990s integrated 40% of the global labour force, into the world economy with large-scale effects in terms market integration, catching up and income distribution. This can be considered as the one-off effect of large-scale integration into global economy which seems to have reached its end. It appears that the sources of productivity growth in the ‘Shifting Wealth I’ stage have been gradually exhausted as opportunities from labour reallocations and efficiency improvements through trade and investment liberalisation have saturated. This has been compounded by decreasing productivity growth globally and by the ‘China effect’ on many emerging and advanced economies, especially Southern EU economies. Hence, it is uncertain whether this process will continue, i.e., whether emerging and transition economies will continue technology upgrading and move from efficiency to innovation-driven growth.

Whether we will observe ‘Shifting Wealth II’ will ultimately depend on whether productivity growth of emerging and transition economies will be driven by technology upgrading. We recognise that the convergence between advanced and emerging/transition economies is a

**GRANT AGREEMENT  
NUMBER — 692191 — SmartEIZ**

process driven by a variety of other factors (population growth, demand as shaped by income distributions and inequalities, technology advances in developed world, global political economy, etc.). However, we also recognise that technology upgrading is one of the major structural features of economies which help us separate long-term trends and drivers of growth from a variety of short and medium cyclical factors that affect the process of convergence and which lead to sharp swings in forecasts and expectations.

We aim to explore the issue of shifting wealth from the perspective of technology upgrading which we define as increasing productivity based on the improved technology capabilities. We consider a broad range of factors that affect technology upgrading: production capabilities, R&D and world frontier innovation activities, structural change, infrastructure, human capital, firm level organisational capacity and technology transfer via trade, FDI and global value chains.

We identify the three knowledge gaps which we would like to explore and hopefully close to a visible extent: first, quantitative and metrics based studies of different dimensions of technology upgrading; second, case studies of technology upgrading at the firm and industry level; third, upgrading through global value chains.

*Quantitative and new metrics based studies of different dimensions of technology upgrading*

There is a dearth of empirical studies which explore various dimensions of technology upgrading of emerging and transition economies. Studies that are based on R&D and patent data dominate. Also, the dominant metrics of relevance for technology upgrading like Global innovation index, EU Innovation Union Scoreboard or Global Competitiveness Index are capturing only a part of the complexity of technology upgrading. These metrics do not capture a range of facets of the activities of technology activities which are present in middle-income economies like production capability, firm level organisational capabilities; low value added activities in high-tech sectors, diffusion of management practices, engineering activities, etc. We welcome contributions which use either new or standard indicators or metrics of relevance for technology upgrading of emerging and transition economies.

**GRANT AGREEMENT  
NUMBER — 692191 — SmartEIZ**

*Case studies of technology upgrading at firm and industry level*

The changing nature of industries is changing patterns of technology upgrading at industry level and factors that affect the building of technology capabilities at the firm level. These processes are increasingly becoming dependent on external sources of knowledge, but we do not have a precise understanding of the main stylised facts of patterns of upgrading at the firm and industry level in a globalised economic context. These insights are quite valuable if we are to understand better outcomes that we observe at macro-level through country-level indicators. Also, these studies are essential if we want to generate new metrics which will reflect the process of upgrading typically for middle-income economies. We welcome contributions of various methodological approaches that bring new evidence on either industry or firm level technology upgrading in emerging and transition economies.

*Technology upgrading through global value chains*

Technology upgrading of emerging and transition economies is inextricably linked to the modes of their integration in global value chains. According to some views (cf. Baldwin 2013) integration in GVC enables plugging economies into global knowledge exchange and thus makes obsolete place-based policies. Another view is that integration into GVC limits emerging economies to improvements in production capability and turning them into ‘assembly economies’. Irrespective of this, our understanding of opportunities, limitations and determinants of the GVC based upgrading especially of countries in transition is quite limited. New data on trade in value added offer new exciting opportunities for research in this area as well as combining these data with other indicators. We invite papers that bring new insights on of how integration via GVC and FDI affects productivity and technology upgrading in emerging and transition economies.

GRANT AGREEMENT  
NUMBER — 692191 — SmartEIZ  
**Part I: Monday 26<sup>th</sup> and Tuesday 27<sup>th</sup>**

**MONDAY 26<sup>th</sup> JUNE 2017**

**09.00-09.40 Registration**

**09.40-09.45 Welcome: Elodie Douarin**

**09.45-10.00 Introduction: Slavo Radosevic, Prof. UCL**

**10.00 – 12.15 First Invited speakers' session- Chair: Elodie Douarin**

- 10.00-10.30 Mariana Mazzucato,  
Professor in the Economics of Innovation and Public Value at UCL  
**“Mission Oriented Innovation: an opportunity for structural change and de-financialisation”**
- 10.30-11.00 Keun Lee, Professor of Economics, Seoul National University  
**“From global value chains to innovation systems for local value creation”**
- 11.00-11.30 Maria Savona, Professor, Science Policy Research Unit, University of Sussex  
**“When Linder meets Hirschman. Backward linkages and GVCs in business services”**
- 11.30-11.45 **Coffee break**
- 11.45-12.15 Raphael Kaplinsky, Honorary Professorial Fellow, Science Policy Research Unit, University of Sussex  
**“Achieving sustainable income growth? Not whether, but how to participate in Global Value Chains?”**
- 12.15-13.00 **First Panel session with invited speakers**  
**Chair: Slavo Radosevic**  
**“Opportunities and limits of catching up via GVC: debating Baldwin hypothesis”**

**13.00-14.00 Lunch break**

**14.00-17.30 Papers presentations – three (3) parallel sessions (room 431; 432; 433)**

**GRANT AGREEMENT  
NUMBER — 692191 — SmartEIZ  
MONDAY 1st PARALLEL SESSION (ROOM 431)**

**TOPIC: Technology upgrading, trade and GVC  
Chair: Juta Guenter**

14.00-14.20	Stefan Bernat and Solmaz Filiz Karabag <b>“The Role of Monitoring and Learning on Capability Upgrading: Cases of Two Brazilian Multinational Firms”</b>
14.20-14.40	Elena Rogova , Elena Tkachenko , Alina Osipenko <b>“Technology transfer and technology audit in Russia”</b>
14.40-15.00	Monika Petraite, Rimantas Rauleckas, Vytaute Dlugoborskyte, Max von Zedtwitz <b>“The mediating role of international networks in the upgrading of domestic innovation systems: the case of Lithuania”</b>
15.00-15.15	<b>Discussant: Maria Savona</b>
15.15-15.30	<b>Questions and answers from audience</b>

**MONDAY 1st PARALLEL SESSION (ROOM 432)**

**TOPIC: Metrics of technology upgrading\*  
Chair: Andrea Salavetz**

14.00-14.20	Marion Frenz and Grazia Ietto-Gillies <b>“Developing Indicators of Absorptive Capacity”</b>
14.20-14.40	Dr Esin Yoruk <b>“Changing patterns of technology intensity and advancing to higher income levels”</b>
14.40-15.00	Daria Podmetina <b>“Shifting towards collaborative innovation in CEE countries: measurement of innovation openness, organisational capabilities and performance change”</b>
15.00-15.15	<b>Discussant: Julia Korosteleva</b>
15.15-15.30	<b>Questions and answers from audience</b>

**MONDAY 1st PARALLEL SESSION (ROOM 433)**

**TOPIC: Policies and conditions for technology upgrading  
Chair: Alex Vera Cruz**

14.00-14.20	Byeongwoo Kang, Yukihito Sato, and Yasushi Ueki <b>“Mobility of highly skilled retirees from Japan to Korea and Taiwan”</b>
14.20-14.40	Vanessa Casadella and Zeting Liu <b>“Innovation policy for development: the case of Senegal”</b>

**GRANT AGREEMENT  
NUMBER — 692191 — SmartEIZ**

- 14.40-15.00 Jeff Readman  
**“Legacy standards and innovation: The Kyrgyz construction materials value chain”**
- 15.00-15.15 **Discussant: Jae-Yong Choung**
- 15.15-15.30 **Questions and answers from audience**

**15.30-16.00 Coffee break**

**16.00-17.30 Papers presentations – three (3) parallel sessions (room 431; 432; 433)**

**MONDAY 2nd PARALLEL SESSION (ROOM 431)  
TOPIC: Technology upgrading, trade and GVC  
Chair: Monika Petraite**

- 16.00-16.20 Maciej Grodzicki  
**“Between creation and extraction of value: international price differences and upgrading in global value chains”**
- 16.20-16.40 Riccardo Crescenzi and Alexander Jaax  
**“Multinational Enterprises and the Geography of Innovation”**
- 16.40-17.00 Alicia Rodríguez, María Jesús Nieto and Virginia Hernández  
**“The role of International and Domestic external knowledge in innovation of firms from transitions economies”**
- 17.00-17.20 Sandrine Kergroach  
**“National Innovation Policies for Technology Upgrading through GVCs: A Cross-Country Comparison”**
- 17.20-17.40 **Discussant: Randolph Bruno**
- 17.40-17.55 **Questions and answers from audience**

**MONDAY 2nd PARALLEL SESSION (ROOM 432)  
TOPIC: NIS and technology upgrading  
Chair: Will McDowal**

**GRANT AGREEMENT  
NUMBER — 692191 — SmartEIZ**

- 16.00-16.20 Bruno Brandão Fischer Paola Rücker Schaeffer Nicholas S. Vonortas  
**“Backbones of the Knowledge Economy? Universities and the Dynamics of Technology Upgrading in a Developing Country”**
- 16.20-16.40 Jurgita Staniulyte and Effie Kesidou  
**“The role of Institutional Entrepreneurship in transforming the National Innovation System of Transition Economy: the case study of Lithuania”**
- 16.40-17.00 Zeting Liu  
**“The Chinese system of eco-innovation: structures, actors, performance”**
- 17.00-17.15 **Discussant: Rajah Fasiah**
- 17.15-17.30 **Questions and answers from audience**

**MONDAY 2nd PARALLEL SESSION (ROOM 433)  
TOPIC: Policies and conditions for technology upgrading\*  
Chair: Balazs Szent-Ivanyi**

- 16.00-16.20 Jolita Čeičytė, Rimantas Rauleckas, Vincent Blok, Monika Petraitė  
**“Societal Challenges Oriented Innovation: The Mediating Role of Responsible Innovation Practices in Stakeholders’ Integration”**
- 16.20-16.40 Keston K. Perry  
**“Networks of power, technology development and short-lived successes in a small developing country”**
- 16.40-17.00 Sorin M.S. Krammer  
**“Science, Technology, and Innovation for Economic Competitiveness: The role of smart specialization in less-developed countries”**
- 17.00-17.15 **Discussion on all three papers**
- 17.15-17.30 **Questions and answers from audience**



**TUESDAY 27<sup>th</sup> JUNE 2017**

**10.00 – 13.15 Papers presentations – three (3) parallel sessions (room 431; 432; 433)**

**TUESDAY 3rd PARALLEL SESSION (ROOM 431)**

**TOPIC: Sector level technology upgrading**

**Chair: Chiara Amini**

- 10.00-10.20 Emanuela Todeva and Donka Keskinova  
**“Biopharma Global Value Chain, and Impediments to Upgrade and Participation of Emerging Economies: The Case of Bulgaria”**
- 10.20-10.40 Lorena Lombardozi  
**“The Uzbek horticulture value chain: Challenges and opportunities of upgrading in a transition economy”**
- 10.40-11.00 Lili Wang, Fang Chen and Mark Knell  
**“Choosing the right path in technology upgrading – Evidence from biotechnology”**
- 11.00-11.15 **Discussant: Riccardo Crescenzi**
- 11.15-11.30 **Questions and answers from audience**

**TUESDAY 3rd PARALLEL SESSION (ROOM 432)**

**TOPIC: NIS and technology upgrading**

**Chair: Eugene Nivorozkhin**

- 10.00-10.20 Nebojsa Stojcic and Zoran Aralica  
**“Regional Patterns of Deindustrialization and Prospects for Reindustrialization in South and Central East European Countries”**
- 10.20-10.40 Halima Jibril, Annina Kaltenbrunner, Effie Kesidou  
**“Financialisation and Investments on Intangible Assets in Emerging Economies: Evidence from Brazil”**
- 10.40-11.00 Justin Yifu Lin and Xuemin Tang  
**“Development Strategy, Trade Structure and Income Inequality— From the Aspect of New Structural Economics”**
- 11.00-11.15 **Discussant: Julia Korosteleva**
- 11.15-11.30 **Questions and answers from audience**

**GRANT AGREEMENT  
NUMBER — 692191 — SmartEIZ**

**TUESDAY 3rd PARALLEL SESSION (ROOM 433)**

**TOPIC: Firm level technology upgrading and its determinants\***

**Chair: Suma Athreye**

- 10.00-10.20 Dr Ksenia Gonchar, Higher School of Economics, Moscow and Philipp Marek (Bundesbank, Germany)  
**“Are technological innovations sufficiently rewarded?”**
- 10.20-10.40 Bozic Ljiljana and Valeria Botric  
**“Comparison of innovation investment decisions in post-transition and developed economies”**
- 10.40-11.00 Liis Roosaar, Jaan Masso, Urmas Varblane  
**“Labour productivity of workers flows in Estonian companies during 2006- 2014, decomposed by age and wage”**
- 11.00-11.15 **Discussant: Andrea Mervar**
- 11.15-11.30 **Questions and answers from audience**

**11.30-12.00 Coffee Break**

**12.00-13.30 Papers presentations – three (3) parallel sessions (room 431; 432; 433)**

**TUESDAY 4th PARALLEL SESSION (ROOM 431)**

**TOPIC: Sector level technology upgrading**

**Chair: Elena Rogova**

- 12.00-12.20 Gang Liu and Shuanping Dai  
**“Emergence of New Products and Agile Innovation in Emerging Economy: Evidences from Low-speed Electric Vehicle Industry in Shandong Province, China”**
- 12.20-12.40 Prof. Yegorov Igor and Dr. Gryga Vitaly  
**“Ukrainian aerospace industry: its potential and perspectives”**
- 12.40-13.00 Marat Myrzakhmet  
**“How Resource-based economies are trying to change their policy on renewable power”**
- 13.00-13.15 **Discussion on all three papers**
- 13.15-13.30 **Questions and answers from audience**

**GRANT AGREEMENT  
NUMBER — 692191 — SmartEIZ**

**TUESDAY 4th PARALLEL SESSION (ROOM 432)  
TOPIC: Policies and conditions for technology upgrading  
Chair: Ksenia Gonchar**

- 12.00-12.20 Edvard Orlic, Dragana Radicic, Merima Balavac  
**“R&D and innovation policy in the Balkans: are there additionality effects?”**
- 12.20-12.40 Dr Fadil Sahiti, Assistant Professor at Rochester Institute of Technology Kosovo, Prishtina, Kosovo  
**“Kosovo and the social conditions of innovative enterprise”**
- 12.40-13.00 Yuri Ichkitidze  
**“Current trends of Russia’s innovative development: what needs to be done to configure policy tools?”**
- 13.00-13.15 **Discussant: Rainer Kattel**
- 13.15-13.30 **Questions and answers from audience**

**TUESDAY 4th PARALLEL SESSION (ROOM 433)  
TOPIC: Firm level technology upgrading and its determinants  
Chair: Nikos Vonortas**

- 12.00-12.20 Deniz E. Yoruk (due to what she asked)  
**“Dynamics of firm-level upgrading and the role of learning in networks”**
- 12.20-12.40 Dr Andrea Salavetz, Senior Research Fellow, Institute of World Economics, Hungarian Academy of Sciences, Budapest  
**“Industry 4.0 and capability development in factory economies”**
- 12.40-13.00 Xinmin Peng, Suli Zheng, Simon Collinson, Xiaobo Wu  
**“Ambidextrous Learning and Technological Capability Upgrading in Emerging Economies: Longitude Case Study from China”**
- 13.00-13.15 **Discussant: Hye-Ran Hwang**
- 13.15-13.30 **Questions and answers from audience**

**13.30-14.30 Lunch Break**

**14.30- 17.50 Second Invited speakers' session- Chair: Randolph Bruno**

**Tuesday Second Invited Speakers Session**

- 14.30-15.00 Suma Athreye, Professor of Technology Strategy, Essex University  
**“Trends, Causes, and Implications of the Globalization of Science and Technology”**
- 15.00-15.30 Rajah Rasiah, Professor, Faculty of Economics and Administration, University of Malaya  
**“Catching Up and Leapfrogging: How East Asia is Driving Technological Upgrading in the Integrated Circuits Industry”**
- 15.30-16.00 G. Dutrénit, J.M. Natera, M. Puchet & A.O. Vera-Cruz  
**“Accumulation of technological capabilities and development profiles: implications for STI policy in Latin America”**
- 16.00-16.30 Paulo N Figueiredo and Marcela Cohen  
**“Early entry into path-creation catch-up in the forestry and pulp industry: The role of windows of opportunity and technological learning of firms with other components of the sectoral innovation system”**
- 16.30- 16.45 **Coffee Break**
- 16.45-17.15 Jae –Yong Choung, Professor, School of Business and Technology Management, KAIST (Korea Advanced Institute of Science and Technology), Daejeon and Hye-Ran Hwang, affiliation  
**“Technological capabilities and non-technological capabilities co-evolution: Transition to industrial leadership in nuclear industry”**
- 17.15-17.45 **Second Panel session with invited speakers**  
**Chair: Slavo Radosevic**  
**Is there global shift II: comparative perspectives?**
- 17.45- 17.50 **Closing Remarks: Elodie Douarin**

**Part II: Wednesday 28<sup>th</sup> June**

28.06.2017 Wednesday

- **Opening Plenary 9.30 – 11.00, Chair Randolph Bruno: Marco Grazzi (Associate Professor in Economics, University of Bologna) “Companies, innovation and Productivity: three intertwined concepts in the literature”**
- 11.15 13 EIZ researchers presentations, Julia Korosteleva:
  - 1) 11.15 11-.50 Valerija Botrić Ljiljana Božić, Tanja Broz: Small is beautiful, but is it innovative? Exploring the differences in R&D between Croatian small and large enterprises
  - 2) 11.50 12.25 Bruno Škrinjarić, Sonja Radas, Andrea Mervar: “Impact of EU funding on Firm Performance: Evidence Based on Funding Differences”
  - 3) 12.25 13 Ljiljana Božić: Sources of business growth in Croatian enterprises

Discussants (one for each paper): Elodie Douarin, Chiara Amini, Silvia Dal Bianco

**13.00-14.00 Lunch Break**

- **Closing plenary, Chair Slavo Radosevic**
  - 14.40 15.20 Marco Grazzi
  - 14.00 14.40 Bruno Douarin Korosteleva Radosevic: “Determinants of productivity in the EU: a Multilevel Perspective” (with a possible focus on extracting some data on Croatia in the wider context)
  - 15.20 16.00 Zoran Aralica – Which type of indicators are suitable for analysing Research and Innovation Strategy on subnational level in New Member States - the case of Croatia?

Open Discussion/Panel (precise format TBC)

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**GRANT AGREEMENT  
NUMBER — 692191 — SmartEIZ**

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**GRANT AGREEMENT  
NUMBER — 692191 — SmartEIZ**

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